

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

MAD-29-10.61

JEFFERSON TOWNSHIP MADISON COUNTY

PROJECT DESCRIPTION

REPLACEMENT OF BRIDGE DECK ON MAD-29-1061 OVER I-70, RECONSTRUCTION OF APPROACH ROADWAY, FULL DEPTH PAVEMENT REPLACEMENT ON RAMP B, AND DITCH CLEANOUT ALONG SNYDER LANE.

EARTH DISTURBED AREA

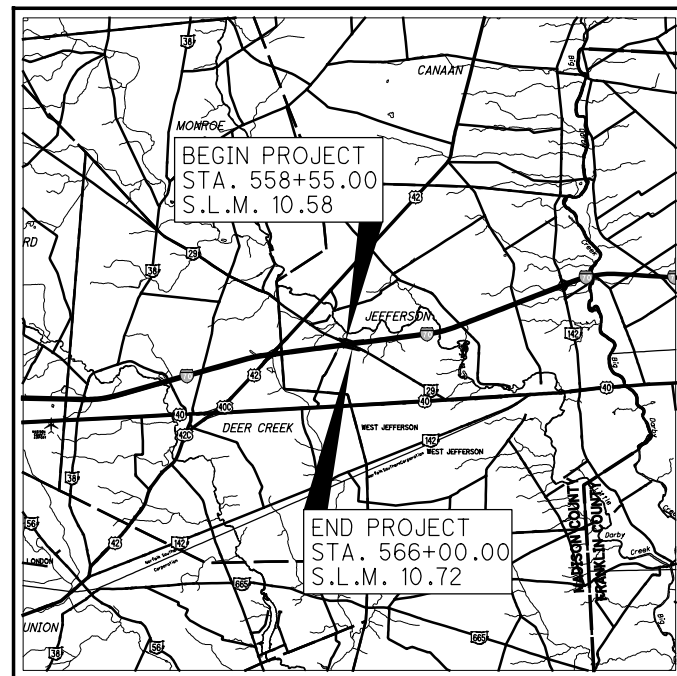
PROJECT EARTH DISTURBED AREA: 1.72*
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25*
NOTICE OF INTENT (NOI) EARTH DISTURBED AREA: N/A*
* MAINTENANCE PROJECT

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.



LOCATION MAP

LATITUDE: 39°57'35" LONGITUDE: 83°20'40"



| | | |
|-------------------------|-------|-------|
| PORTION TO BE IMPROVED | ----- | ===== |
| INTERSTATE HIGHWAY | ----- | ===== |
| FEDERAL ROUTES | ----- | ===== |
| STATE ROUTES | ----- | ===== |
| COUNTY & TOWNSHIP ROADS | ----- | ===== |
| OTHER ROADS | ----- | ===== |

DESIGN DESIGNATION

| | | |
|----------------------------------|-------|----------------------------|
| CURRENT ADT (2017) | ----- | 3,400 |
| DESIGN YEAR ADT (2029) | ----- | 4,200 |
| DESIGN HOURLY VOLUME (2029) | ----- | 500 |
| DIRECTIONAL DISTRIBUTION | ----- | 59% |
| TRUCKS (24 HOUR B&C) | ----- | 13% |
| DESIGN SPEED | ----- | 60 MPH |
| LEGAL SPEED | ----- | 55 MPH |
| DESIGN FUNCTIONAL CLASSIFICATION | ----- | 05 MAJOR COLLECTOR (RURAL) |
| NHS PROJECT | ----- | NO |

DESIGN EXCEPTIONS

NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:

PARSONS

100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235

INDEX OF SHEETS:

| | |
|--|---------|
| TITLE | 1 |
| TYPICAL SECTIONS | 2 - 3 |
| PAVEMENT DETAILS | 4 |
| GENERAL NOTES | 5 - 6 |
| MAINTENANCE OF TRAFFIC NOTES | 7 - 8 |
| DETOUR PLANS | 9 - 10 |
| GENERAL SUMMARY | 11 - 12 |
| ROADWAY SUBSUMMARY | 13 |
| PAVEMENT SUBSUMMARY | 14 |
| CALCULATIONS | 15 - 16 |
| PROJECT SITE PLAN | 17 - 18 |
| PLAN & PROFILE | 19 - 22 |
| CROSS SECTIONS - ROADWAY | 23 - 29 |
| SUPERELEVATION TABLE | 30 |
| CROSS SECTIONS - CHANNEL | 31 - 43 |
| TRAFFIC CONTROL | 44 - 46 |
| STRUCTURES OVER 20 FOOT SPAN MAD-29-1061 | 47 - 76 |

ENGINEERS SEAL:

FOR STRUCTURES OVER 20 FOOT SPAN



SIGNED: *Robert W. Ballard III*
DATE: 5/1/2020

ENGINEERS SEAL:

FOR ENTIRE PLAN EXCEPT STRUCTURES OVER 20 FOOT SPAN



SIGNED: *Giovanni Furio*
DATE: 5/1/2020

STANDARD CONSTRUCTION DRAWINGS

| BP-1.1 | 7/28/00 | MGS-1.1 | 1/19/18 | AS-1-15 | 7/17/15 | MT-95.30 | 7/19/19 | 800 | 7/17/20 | | | | | | | | | |
|--------|---------|---------|---------|-----------|---------|-----------|----------|-----|----------|--|--|--|--|--|--|--|--|--|
| BP-2.1 | 7/17/15 | MGS-2.1 | 1/19/18 | AS-2-15 | 1/18/19 | MT-98.29 | 1/17/20 | 831 | 10/21/16 | | | | | | | | | |
| BP-2.2 | 7/18/08 | MGS-3.1 | 1/19/18 | GSD-1-19 | 1/18/19 | MT-101.60 | 1/17/20 | 832 | 10/19/18 | | | | | | | | | |
| BP-2.3 | 7/18/14 | MGS-4.3 | 1/18/13 | SBR-1-13 | 7/20/18 | MT-101.90 | 7/21/17 | 846 | 4/17/15 | | | | | | | | | |
| BP-2.4 | 7/19/13 | MGS-5.2 | 7/15/16 | VPF-1-90 | 7/20/18 | MT-105.10 | 1/17/20 | 892 | 12/31/12 | | | | | | | | | |
| BP-2.5 | 7/19/13 | MGS-5.3 | 7/15/16 | SICD-1-96 | 7/18/14 | TC-52.10 | 10/18/13 | | | | | | | | | | | |
| BP-3.1 | 1/17/20 | MGS-6.1 | 1/19/18 | SICD-2-14 | 7/18/14 | TC-61.30 | 7/19/19 | | | | | | | | | | | |
| BP-6.1 | 7/19/13 | | | | | TC-65.10 | 1/17/14 | | | | | | | | | | | |
| | | | | | | TC-65.11 | 7/21/17 | | | | | | | | | | | |
| | | | | | | TC-72.20 | 7/20/18 | | | | | | | | | | | |
| DM-1.1 | 7/21/17 | | | | | | | | | | | | | | | | | |
| DM-1.2 | 1/18/13 | | | | | | | | | | | | | | | | | |
| DM-4.1 | 7/20/18 | | | | | | | | | | | | | | | | | |
| DM-4.2 | 7/20/12 | | | | | | | | | | | | | | | | | |
| DM-4.3 | 1/15/16 | | | | | | | | | | | | | | | | | |
| DM-4.4 | 1/15/16 | | | | | | | | | | | | | | | | | |

PLAN CERTIFIED AS TO COMPLETENESS AND QUALITY

Robert W. Ballard III 5/1/2020
SIGNATURE DATE
PARSONS SENIOR ENGINEERING MANAGER
FIRM TITLE

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEETS 9-10, AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON THE PLANS.

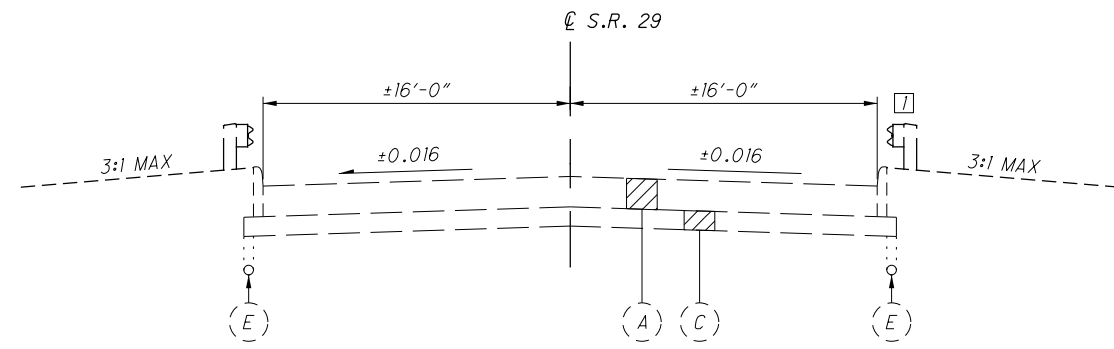
APPROVED: *Matthew R. Bluff*
DATE: 6/18/2020 DISTRICT DEPUTY DIRECTOR

APPROVED: _____
DATE: _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

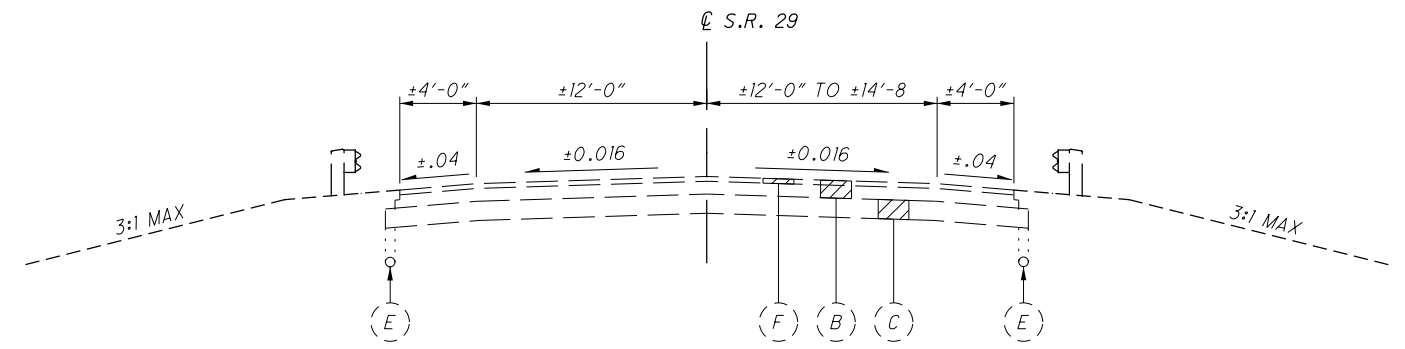
FEDERAL PROJECT NO. E170 (753)
CONSTRUCTION PROJECT NO. 104867
RAILROAD INVOLVEMENT NONE
MAD-29-10.61
1/76

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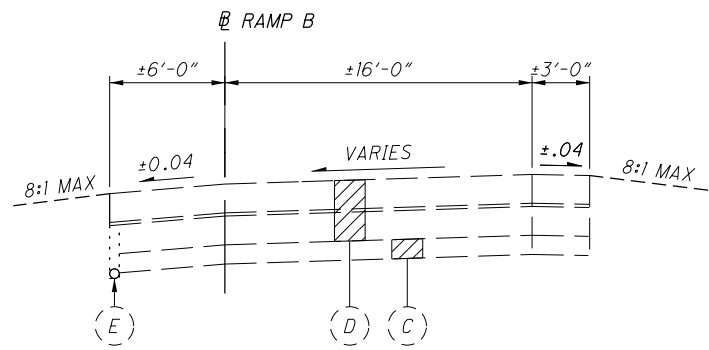
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EXISTING SECTION
STA. 558+50.00 TO STA. 559+47.82



EXISTING SECTION
STA. 565+44.14 TO STA. 566+00.00



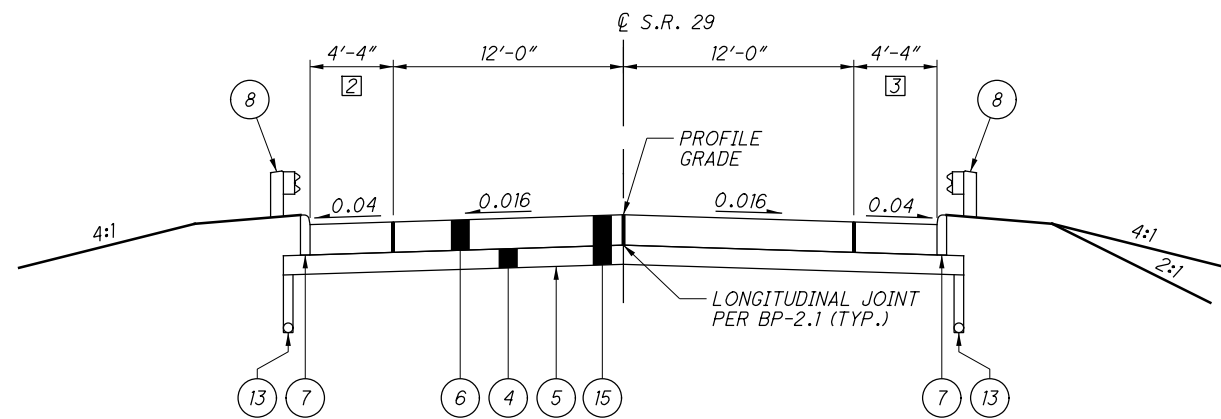
EXISTING RAMP B SECTION
STA. 46+50.00 TO STA. 47+40.00
STA. 542+86.00 TO STA. 547+37.53

LEGEND

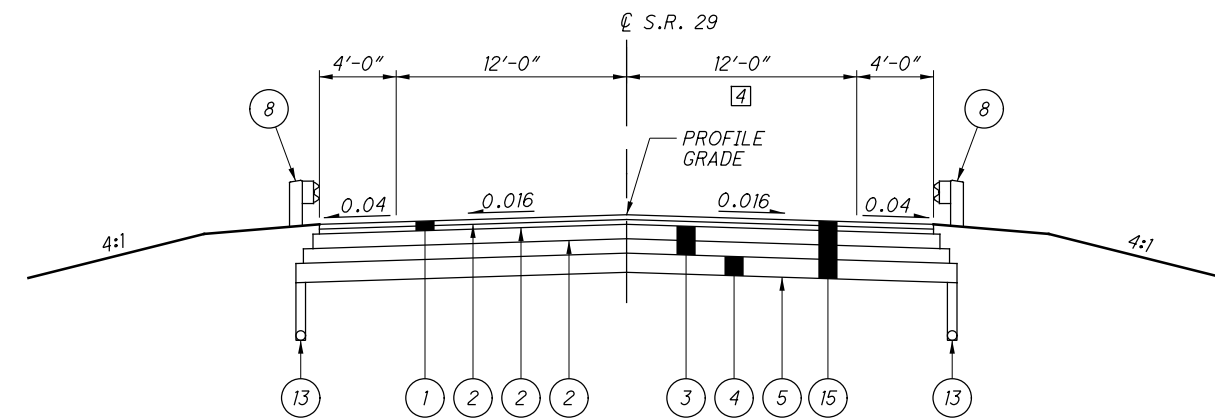
- | | | |
|--|---|------------------------------------|
| (A) EXISTING ±9 1/2" NON-REINFORCED CONCRETE | (D) EXISTING ±9" CONCRETE, ±1" ASPHALT BOND BREAKER & ±9" CONCRETE PAVEMENT | (F) EXISTING 1/2" ASPHALT PAVEMENT |
| (B) EXISTING ±5 1/2" ASPHALT PAVEMENT | | |
| (C) EXISTING ±6" AGGREGATE BASE | (E) EXISTING 6" UNDERDRAIN | |

FROM STA. 559+35.00 TO STA. 559+47.82

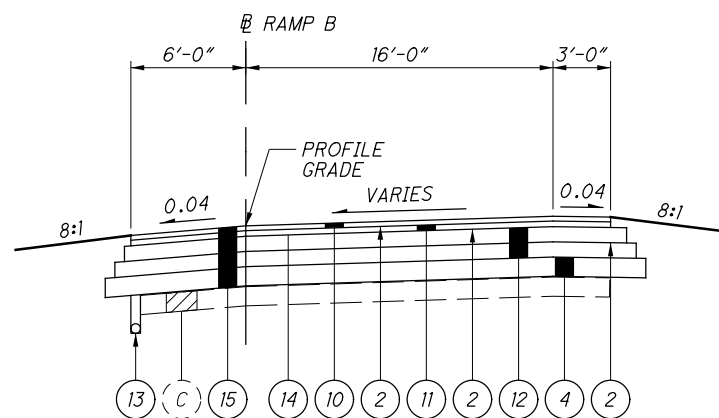
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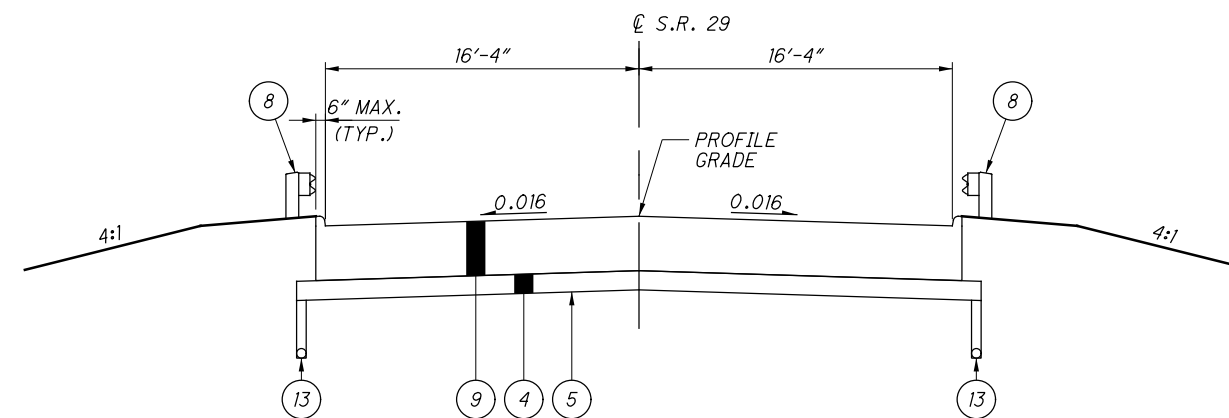
PROPOSED CONCRETE SECTION
 STA. 558+55.00 TO STA. 559+47.38



PROPOSED ASPHALT SECTION
 STA. 565+48.62 TO STA. 566+00.00
 STA 565+48.62 TO STA 565+73.62 PER STD DWG AS-2-15.
 ITEM 301, ASPHALT CONCRETE BASE T=14 1/2" TRANSITION
 TO T=6 1/2" AS FROM STA 564+53.87 TO STA 564+73.62



RAMP B SECTION
 STA. 46+50.00 TO STA. 47+40.00
 STA. 542+86.00 TO STA. 547+37.53

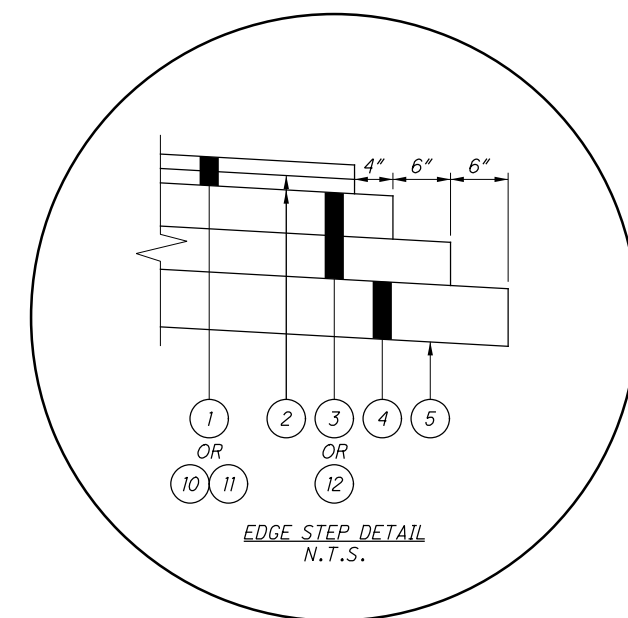


APPROACH SLAB
 STA. 559+47.38 TO STA. 559+77.38
 STA. 565+18.62 TO STA. 565+48.62

LEGEND

- | | |
|--|---|
| <ul style="list-style-type: none"> ① ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 (T=3") * ② ITEM 407 - NON-TRACKING TACK COAT (RATE PER CMS TABLE 407.06-1) ③ ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (T=9") * ④ ITEM 304 - AGGREGATE BASE (T=6") ⑤ ITEM 204 - SUBGRADE COMPACTION ⑥ ITEM 452 - 9.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 ⑦ ITEM 609 - CURB, TYPE 6 ⑧ ITEM 606 - GUARDRAIL, TYPE MGS | <ul style="list-style-type: none"> ⑨ ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=17") ⑩ ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN (PG76-22M) (T=1.5") ⑪ ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446) (T=1.75") ⑫ ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (T=9.5") ** ⑬ ITEM 605 - 6" BASE PIPE UNDERDRAIN ⑭ ITEM 442 - ANTI-SEGREGATION EQUIPMENT ⑮ ITEM 202 - PAVEMENT REMOVED |
|--|---|

* PLACE IN TWO EQUAL LIFTS WITH NON-TRACKING TACK COAT IN BETWEEN
 ** PLACE IN ONE 4.5" LIFT & ONE 5.0" LIFT WITH NON-TRACKING TACK COAT IN BETWEEN
 ② VARIES 4'-0" TO 4'-4", FROM STA. 558+55.00 TO STA. 558+64.00
 ③ VARIES 4'-0" TO 4'-4", FROM STA. 558+55.00 TO STA. 558+58.00
 ④ VARIES 12'-0" TO 14'-8", FROM STA. 565+53.03 TO STA. 566+00.00



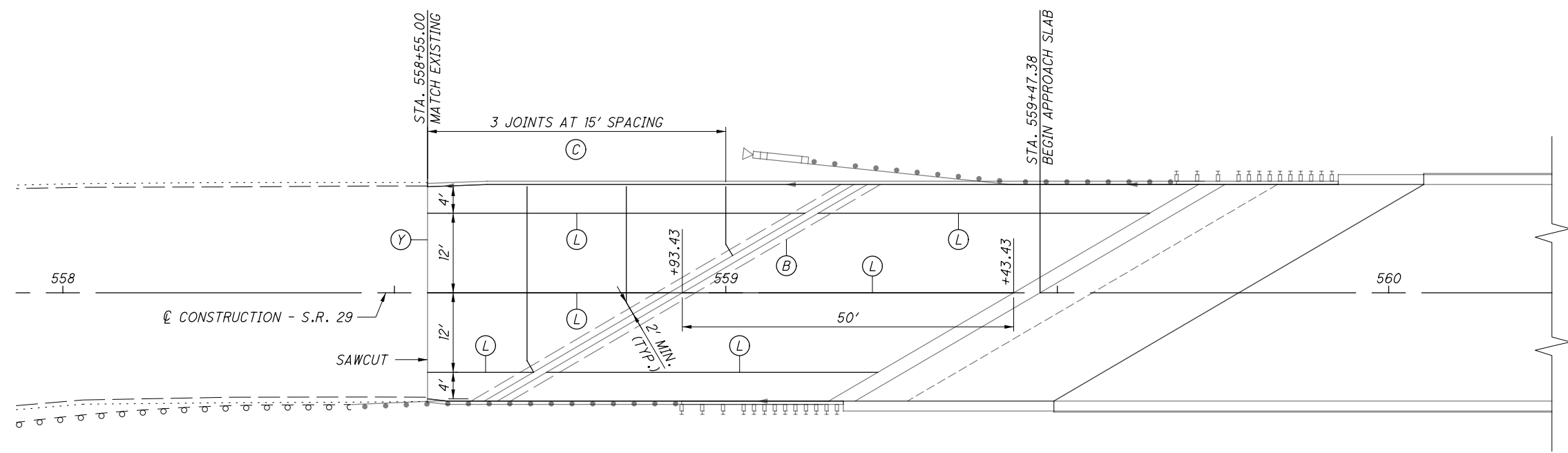
CALCULATED
 GF
 CHECKED
 DWO

PROPOSED TYPICAL SECTIONS

MAD-29-10.61

3
76

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LEGEND

- (B) PRESSURE RELIEF JOINT, TYPE B
- (C) SAWED CONTRACTION JOINT AS PER BP-2.2
- (L) STANDARD LONGITUDINAL JOINT AS PER BP-2.1
- (Y) BUTT JOINT BETWEEN EXISTING PAVEMENT AND PROPOSED PAVEMENT. A DOWELLED TYPE Y JOINT AS PER BP-2.5 SHALL BE PROVIDED. GROUTING AND DRILLING REQUIREMENTS SHALL BE PER SPECIFICATION 255 AND BP-2.5.

CALCULATED GF CHECKED SDC

0 10 20
HORIZONTAL SCALE IN FEET

PAVEMENT JOINT DETAIL

MAD-29-10.61

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ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

CENTURYLINK/QWEST
 DANIEL BECKETT
 441 WEST BROAD ST.
 PATASKALA, OHIO 43062
 (740) 927-8282
 DANIEL.E.BECKETT@CENTURYLINK.COM

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

EXISTING PLANS

EXISTING PLANS ENTITLED MAD-70-8.62 (PID 107109), MAD-70-10.27 (PID 83245), S.R. 29 IMPROVEMENTS AT I-70 EASTBOUND RAMP (PID 109471), MAD-70-8.68 (PID 19124), MAD-70-6.25 (I-70-3(9175)), & D06-EXTRUSIGN-CITIES (PID 89303) MAY BE INSPECTED IN THE ODOT DISTRICT 6 OFFICE IN DELAWARE, OHIO.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS, AS DEFINED ABOVE, WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

CLEARING AND GRUBBING

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

| SIZES | NO. TREES | NO. STUMPS | TOTAL |
|-------|-----------|------------|-------|
| 18" | 6 | | 6 |
| 30" | 1 | | 1 |
| 48" | 1 | | 1 |

CONTRACTION AND/OR EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. IN ALL CASES, THE PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES INCLUDING THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS IS IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 10 P.M. AND 7 A.M. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE THIS SHEET FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: GPS (VRS)
 MONUMENT TYPE: CONCRETE MONUMENTS

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
 GEOID: GEOID12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAV83 (2011)
 ELLIPSOID: GRS80
 MAP PROJECTION: LAMBERT CONFORMAL CONIC
 COORDINATE SYSTEM: OHIO STATE PLANE, SOUTH ZONE
 COMBINED SCALE FACTOR: 1.0000000000
 ORIGIN OF COORDINATE
 SYSTEM: 1 METER = OHIO STATE PLANE, SOUTH ZONE (0,0)

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 823.

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

| BENCHMARKS FOR PROJECT MAD-29-10.61 | | | |
|-------------------------------------|---|---------------------|--------------|
| BM-# | DESCRIPTION | | |
| | NORTHING: 714844.27 | EASTING: 1732586.10 | ELEV: 964.41 |
| BM-1 | TOP OF IRON PIN IN CENTERLINE CONCRETE MONUMENT AT STATION 551+00 ±150 FT EAST OF OVERHEAD TRUSS SIGN SUPPORT OVER WEST BOUND I-70 EXIT 79/EXIT 80. | | |
| | NORTHING: 715219.77 | EASTING: 1735544.56 | ELEV: 964.18 |
| BM-4 | 13" CUT NORTH SIDE CONCRETE PAD FOR CABLE GUARDRAIL BARRIER ±100 FT WEST OF EMERGENCY TURN AROUND, ±1/2 MILE EAST OF SR-29 OVERPASS IN MEDIAN. | | |

MEDIAN AND/OR CURBING ON APPROACH SLABS

WITHIN THE LIMITS OF THE APPROACH SLAB, TRANSITION THE SHAPE OF THE MEDIAN AND/OR CURBING ON APPROACH SLABS FROM THE STANDARD SECTION ON THE APPROACHES TO THE SECTION USED ON THE BRIDGE.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

| | |
|---------------------------------------|-------------|
| ITEM 659, SOIL ANALYSIS TEST | 1 EACH |
| ITEM 659, TOPSOIL | 90 CU. YD. |
| ITEM 659, SEEDING AND MULCHING | 811 SQ. YD. |
| ITEM 659, REPAIR SEEDING AND MULCHING | 41 SQ. YD. |
| ITEM 659, COMMERCIAL FERTILIZER | 0.12 TON |
| ITEM 659, LIME | 0.17 ACRES |
| ITEM 659, WATER | 6 M. GAL. |

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

| | |
|--|--------|
| ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAINS | 20 FT. |
|--|--------|

ASBESTOS ABATEMENT

ON JULY 24, 2017, MR. MATTHEW GEIGER, OHIO DEPARTMENT OF HEALTH (ODH) CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST (AHES OH #35832) OF LAWHON & ASSOCIATES, INC. (L&A) CONDUCTED AN ASBESTOS SURVEY OF MAD-00029-10610 (OH-29) BRIDGE (SFN #4900243) OVER I-70, MADISON, OHIO. NO ASBESTOS CONTAINING MATERIAL (ACM) WAS IDENTIFIED IN THE COURSE OF THE SURVEY.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY NOTIFICATION FOR ASBESTOS DEMOLITION AND RENOVATION FORM WITH SECTIONS I-IV & VI COMPLETED IS AVAILABLE AT THE DISTRICT 6 ODOT OFFICE (PLANNING DEPARTMENT). THE FORM MUST BE SUBMITTED TO OEPA-CDO (P.O. BOX 1049, COLUMBUS, OHIO 43216-1049) AT LEAST 10 DAYS PRIOR TO DEMOLITION/RENOVATION ACTIVITIES.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE B

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

THE FACE OF THE TYPE B IMPACT HEAD SHALL BE COVERED WITH TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE B, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING REFLECTIVE SHEETING AND ALL RELATED HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN (PG76-22M) (T=1.5")

THE SURFACE COURSE BINDER FOR RAMP B PAVEMENT SHALL BE PG76-22M.

ANTI-SEGREGATION EQUIPMENT

PROVIDE ANTI-SEGREGATION EQUIPMENT FOR ALL COURSES OF UNIFORM THICKNESS IN ACCORDANCE WITH CMS 401.12.

RIGHT-OF-WAY

WORK TO BE PERFORMED ON MADISON COUNTY ROAD RIGHT-OF-WAY (SNYDER LANE) PER LETTER OF AGREEMENT DATED 5/6/20.

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| GENERAL NOTES | | | | | |
| MAD - 29 - 10.61 | | | | | |
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ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO 204.05.

IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
3. COMPACT THE SUBGRADE ACCORDING TO 204.03.
4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS. PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO 204.06.
5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO 204.06 TO VERIFY STABILITY.
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204 EXCAVATION OF SUBGRADE.

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

ITEM SPECIAL - PIPE CLEANOUT

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 105.16 AND 105.17. ALL SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL - PIPE CLEANOUT. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE NOTED WORK:

| | |
|---------------------------------------|---------|
| SPECIAL, PIPE CLEANOUT, 24" AND UNDER | 247 FT. |
| SPECIAL, PIPE CLEANOUT, 27" TO 48" | 314 FT. |

ITEM 632 SIGNALIZATION, MISC.: RWIS SENSOR, VX21-2

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NEW AND COMPLETE OPERATIONAL RWIS (REMOTE WEATHER INFORMATION SYSTEM) SENSOR ON THE NEW MAD-29-10.61 BRIDGE DECK, MEETING THE REQUIREMENTS AS DESCRIBED BELOW. THE NEW SENSOR SHALL BE LOCATED LESS THAN 500 FEET FROM THE NEAREST RWIS TOWER AND SHALL BE LOCATED WITH THE CONCURRENCE OF THE MANUFACTURER'S REPRESENTATIVE AND THE ODOT ENGINEER.

THE PROPOSED SENSOR UNIT SHALL BE M.H. CORBIN, INC., TYPE VX21. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS AND INSTALLATION GUIDELINES. THE REMOVAL AND DISPOSAL OF THE EXISTING SENSOR (LOCATED IN THE EXISTING BRIDGE DECK) SHALL BE INCIDENTAL TO THE COST OF "PORTIONS OF STRUCTURES REMOVED, AS PER PLAN".

THE CONTRACTOR SHALL CONTACT THE SENSOR MANUFACTURER'S REPRESENTATIVE, WHO WILL BE PRESENT WHILE THE PROPOSED SENSOR IS BEING INSTALLED:

M.H. CORBIN, INC.
9042 HERITAGE DRIVE
PLAIN CITY, OHIO 43064
(614) 592-7430

REFER TO ATTACHED FIGURES A-E SHEET 44 FOR TYPICAL VX21-2 INSTALLATION INFORMATION.

THE PROPOSED SENSOR CANISTER SHALL BE INSTALLED USING THE PROPER CANISTER INSTALLATION TOOLS PER THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND INSTALLATION GUIDELINES. IT IS THE INTENT FOR THE PROPOSED SENSOR TO BE PLACED AT THE SAME LOCATION AS THE EXISTING UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER'S REPRESENTATIVE AND/OR THE ODOT ENGINEER. CONTRACTOR SHALL NOTIFY THE ODOT DISTRICT 6 HIGHWAY MANAGEMENT OFFICE (DAN WISE, (740) 833-8023) WHEN THE SENSOR IS REMOVED FROM THE EXISTING BRIDGE DECK AND WHEN THE PROPOSED SENSOR INSTALLATION IS COMPLETE. THE DISTRICT WILL MONITOR THE NEW SENSOR'S PERFORMANCE FOR A MINIMUM OF FIVE (5) WORKING DAYS TO VERIFY PROPER OPERATION. IF THE SENSOR DOES NOT PERFORM PROPERLY WITHIN THIS TEST PERIOD, THE CONTRACTOR (WITH ASSISTANCE FROM THE MANUFACTURER'S REPRESENTATIVE) SHALL VERIFY THAT THE INSTALLATION IS CORRECT. IF THE SENSOR CONTINUES TO MALFUNCTION, THE CONTRACTOR SHALL REPLACE THE UNIT.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID OF ITEM 632 - RWIS SENSOR, VX21-2, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO INSTALL A COMPLETE AND FUNCTIONING RWIS SENSOR, VX-21-2.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY:

ITEM 632, SIGNALIZATION, MISC.: RWIS SENSOR, VX21-2 1 EACH

ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

ENVIRONMENTAL COMMITMENTS

1. THE CONTRACTOR SHALL NOT STAGE OR STORE ANY CONSTRUCTION EQUIPMENT WITHIN THE DEFINED BOUNDARIES OF THE LITTLE DARBY CREEK.
2. IF HERBICIDAL SPRAYING IS NECESSARY WITHIN 1,000 FEET OF A DESIGNATED SCENIC RIVER, THEN A STATE LICENSED PUBLIC APPLICATOR SHALL APPLY ONLY OHIO EPA AQUATIC APPROVED GLYPHOSATE, N-(PHOSPHONOMETHYL) GLYCINE IN THE FORM OF ITS ISOPROPYLAMINE SALT HERBICIDE AND SURFACTANT AT THE LABELED RATES IN THE FRONT, UNDER AND BEHIND (18") GUARDRAIL AND ABUTMENT WING WALLS. THE HERBICIDE MUST BE SAFE FOR APPLICATION ON OR NEAR STANDING WATER. THE APPLICATION OF THE HERBICIDE SHALL NOT INCLUDE ANY SOIL DISTURBANCE ACTIVITIES. IF ANY OTHER TYPES OF HERBICIDES OR HERBICIDAL APPLICATIONS ARE NECESSARY, THEN THE DISTRICT ENVIRONMENTAL COORDINATOR MUST BE CONTACTED AT (740) 833-8065 PRIOR TO THE COMMENCEMENT OF THE APPLICATION TYPE.
3. NO TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINTS, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER, FUELS OR DEBRIS OF ANY KIND SHALL BE DISCHARGED TO A SCENIC RIVER (LITTLE DARBY CREEK) OR TRIBUTARY WATER COURSES. ALL ASPHALT OR CONCRETE GRINDINGS, EXCESS ASPHALTIC OR CONCRETE MATERIALS OR ANY OTHER DEBRIS GENERATED DURING RESURFACING OR SIMILAR ACTIVITIES SHALL BE REMOVED IMMEDIATELY FROM WITHIN 1,000 FEET OF A SCENIC RIVER (LITTLE DARBY CREEK) AND DISPOSED OF AT AN APPROPRIATE FACILITY ABOVE THE FEMA 100 YEAR FLOOD ELEVATION AND NOT WITHIN 1,000 FEET OF THE DESIGNATED SCENIC RIVER (LITTLE DARBY CREEK).
4. IF ROADSIDE DITCH MAINTENANCE IS NECESSARY WITHIN 1,000 FEET OF A DESIGNATED STATE SCENIC RIVER (LITTLE DARBY CREEK), THEN THE DITCH SHALL BE MAINTAINED ONLY FOR THE ORIGINAL INTENDED FUNCTION AND RESTORED TO THE ORIGINAL DESIGN CONFIGURATION, UNLESS THE DITCH LINE WILL BE MODIFIED FOR WATER QUALITY ISSUES SUCH AS STORM WATER CONTROL OR MITIGATION. ANY DENUDED DITCHES SHALL BE SEEDED AND PROTECTED IMMEDIATELY WITH NATURAL EROSION CONTROL MATTING OR SOD UPON COMPLETION OF EARTHWORK. STRAW BALES SHALL NOT BE UTILIZED AS A FORM OF SEDIMENT AND EROSION CONTROL. ALL SEDIMENT AND EROSION CONTROLS SHALL BE REMOVED UPON STABILIZATION OF THE PROJECT AREA. IF WORK EXCEEDS THESE RESTRICTIONS THEN THE DISTRICT ENVIRONMENTAL COORDINATOR MUST BE NOTIFIED IMMEDIATELY AT (740) 833-8065.

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GENERAL NOTES

MAD - 29 - 10.61

ITEM 614, MAINTAINING TRAFFIC

TRAFFIC ON S.R. 29 AND RAMPS SHALL BE DETOURED FOR 120 DAYS DURING THE IMPROVEMENTS TO THE MAD-29-10.61 BRIDGE AND ASSOCIATED ROADWAY APPROACH WORK AS DETAILED IN THESE PLANS. TRAFFIC ON RAMP B SHALL BE DETOURED FOR 30 DAYS DURING THE FULL DEPTH PAVEMENT REPLACEMENT AS DETAILED IN THESE PLANS. WORK AREA FOR RAMP B AND MAD-29-10.61 BRIDGE SHALL NOT BE OPEN UNLESS PERMANENT PAVEMENT MARKINGS ARE PLACED. ALL WORK REQUIRED TO MAINTAIN THE ROADWAYS AND DETOURS, UNLESS OTHERWISE PROVIDED IN THESE PLANS, SHALL BE INCLUDED IN ITEM 614 MAINTAINING TRAFFIC. PAYMENT FOR THIS ITEM SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 614, MAINTAINING TRAFFIC (LUMP) AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

TIME LIMITATION ON A DETOUR

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION ON S.R. 29 SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 120 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 9. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$4,500 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

TRAFFIC ON RAMP B, I-70 WB TO S.R. 29, SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 30 CONSECUTIVE CALENDAR DAYS, WHEN RAMP TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 10. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$1,500 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

| | | |
|----------------|----------------|--------------|
| CHRISTMAS | FOURTH OF JULY | MEMORIAL DAY |
| NEW YEAR'S EVE | LABOR DAY | THANKSGIVING |

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY TIME ALL LANES MUST BE OPEN TO TRAFFIC

| | | | | | |
|--------------|------------|-----------|---------|---------|-----------|
| SUNDAY | 12:00 NOON | FRIDAY | THROUGH | 6:00 AM | MONDAY |
| MONDAY | 12:00 NOON | FRIDAY | THROUGH | 6:00 AM | TUESDAY |
| TUESDAY | 12:00 NOON | MONDAY | THROUGH | 6:00 AM | WEDNESDAY |
| WEDNESDAY | 12:00 NOON | TUESDAY | THROUGH | 6:00 AM | THURSDAY |
| THURSDAY | 12:00 NOON | WEDNESDAY | THROUGH | 6:00 AM | FRIDAY |
| THANKSGIVING | 6:00 AM | WEDNESDAY | THROUGH | 6:00 AM | MONDAY |
| FRIDAY | 12:00 NOON | THURSDAY | THROUGH | 6:00 AM | MONDAY |
| SATURDAY | 12:00 NOON | FRIDAY | THROUGH | 6:00 AM | MONDAY |

SPECIAL EVENTS

FARM SCIENCE REVIEW - LANE OR SHOULDER CLOSURES ARE NOT PERMITTED DURING THE FARM SCIENCE REVIEW 5AM-10PM DAILY ON THE FOLLOWING ROUTES:

- I-70 BETWEEN S.R. 54 (CLARK COUNTY) AND S.R. 142
- S.R. 38 BETWEEN S.R. 29 AND U.S. 42
- S.R. 56 BETWEEN HOUSTON PIKE AND U.S. 42
- U.S. 40 BETWEEN S.R. 54 (CLARK COUNTY) AND S.R. 142
- U.S. 42 BETWEEN S.R. 38 AND S.R. 29
- S.R. 29 BETWEEN I-70 AND S.R. 187

DELAWARE COUNTY FAIR - LANE OR SHOULDER CLOSURES ARE NOT PERMITTED DURING THE DELAWARE COUNTY FAIR 6AM-10PM DAILY ON THE FOLLOWING ROUTES:

- U.S. 23 BETWEEN S.R. 750 AND S.R. 98
- U.S. 36 BETWEEN S.R. 257 AND I-71
- S.R. 37 BETWEEN S.R. 257 AND I-71
- U.S. 42 BETWEEN S.R. 229 AND S.R. 745
- S.R. 521 BETWEEN U.S. 36 AND S.R. 61

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA WIDE. SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN ACCORDANCE WITH THE LANE VALUE CONTRACT TABLE.

LANE CLOSURE

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

| LANE VALUE CONTRACT TABLE | | | | | | |
|---|--|---------------------------------|--------------------|-----------|-----------------|--|
| SECTION | EXISTING NUMBER OF LANES PER DIRECTION | LANE CLOSURES ARE NOT PERMITTED | | | | DISINCENTIVE AMOUNTS PER MINUTE PER LANE |
| | | LANE REDUCTION | MONDAY TO THURSDAY | FRI | SATDAY & SUNDAY | |
| CLARK COUNTY LINE (10.00) TO FRANKLIN COUNTY LINE (15.58) | 3 | 3 TO 2 | NO RESTRICTION | 4PM - 6PM | NO RESTRICTION | \$250 |
| | | 3 TO 1 | 6AM - 7PM | 6AM - 8PM | 8AM - 9PM | \$250 |
| SHORT TERM SHOULDER CLOSURES ARE PERMITTED ANY TIME EXCEPT 6AM-9AM AND 3PM-6PM, MONDAY-FRIDAY | | | | | | |

NOTICE OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE OFFICE OF COMMUNICATIONS. THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE BUT IS NOT LIMITED TO ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, DETOUR ROUTES IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

| NOTIFICATION TIME FRAME TABLE | | | |
|---|----------------------|--|-----------------------------------|
| ITEM | DURATION OF CLOSURE | NOTIFICATION DUE TO DISTRICT 6 COMMUNICATIONS OFFICE | SIGN DISPLAY TO PUBLIC |
| RAMP & ROAD CLOSURES | >=2 WEEKS | 21 CALENDAR DAYS PRIOR TO CLOSURE | 14 CALENDAR DAYS PRIOR TO CLOSURE |
| | >12 HOURS & <2 WEEKS | 14 CALENDAR DAYS PRIOR TO CLOSURE | 7 CALENDAR DAYS PRIOR TO CLOSURE |
| | <12 HOURS | 4 BUSINESS DAYS PRIOR TO CLOSURE | 2 BUSINESS DAYS PRIOR TO CLOSURE |
| LANE CLOSURES & RESTRICTIONS | >=2 WEEKS | 14 CALENDAR DAYS PRIOR TO CLOSURE | NA |
| | <2 WEEKS | 2 BUSINESS DAYS PRIOR TO CLOSURE | NA |
| START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES | NA | 14 CALENDAR DAYS PRIOR TO IMPLEMENTATION | NA |

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME FRAME TABLE.

ESTIMATED QUANTITIES

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE MAINTENANCE OF TRAFFIC SUBSUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

| | |
|--|------------|
| ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC | 10 CU. YD. |
| ITEM 616, WATER | 1 M. GAL. |

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC (SECTION 642-2).

ALTERNATE MAINTENANCE OF TRAFFIC PLANS

IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLANS SHALL BE PLACED IN EFFECT UNTIL APPROVAL HAS BEEN GRANTED IN WRITING BY THE ODOT DISTRICT CONSTRUCTION ENGINEER.

NOTIFICATION OF CONSTRUCTION INITIATION

AT LEAST FOURTEEN DAYS PRIOR TO STARTING INITIAL CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS VIA EMAIL AT d06.pio@dot.ohio.gov, THE DISTRICT WORK ZONE TRAFFIC MANAGER VIA EMAIL AT d06.mot@dot.ohio.gov AND THE CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614) 728-4099, OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES INCLUDING, BUT NOT LIMITED TO, THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION SHALL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE CONTRACTOR, A POINT OF CONTACT AND THE ANTICIPATED IMPACT ON TRAFFIC. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT WORK ZONE TRAFFIC MANAGER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

PUBLIC OUTREACH AND NOTIFICATION (ROAD CLOSURE)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE DISTRICT 6 PUBLIC INFORMATION OFFICE VIA EMAIL AT d06.pio@dot.ohio.gov TO COORDINATE EFFORTS TO NOTIFY ALL LOCAL COUNTY, STATE AND FEDERAL EMERGENCY SERVICES, SCHOOL DISTRICTS AND ADJACENT RESIDENTS AND BUSINESSES OF THE UPCOMING CLOSURE. ADVANCE NOTIFICATION SHALL OCCUR NO LATER THAN TWENTY-ONE (21) DAYS PRIOR TO CLOSING THE ROAD. IF, SUBSEQUENT TO THE ADVANCE NOTIFICATION, THE START DATE IS CHANGED, THEN A NEW SEVEN (7) DAY NOTIFICATION WILL BE REQUIRED. THE ROAD CANNOT BE CLOSED UNLESS PRIOR NOTIFICATION HAS BEEN ACCOMPLISHED. THE SAME PARTIES SHALL BE NOTIFIED WHEN THE CLOSURE HAS CONCLUDED AND THE ROAD IS BACK OPEN TO TRAFFIC. ALL NOTIFICATIONS SHALL BE MADE UTILIZING THE TEMPLATE PROVIDED BY THE DISTRICT 6 PUBLIC INFORMATION OFFICE.

ITEM 614, DETOUR SIGNING

SIZE AND PLACEMENT OF DETOUR SIGNS (M4-9) SHOULD FOLLOW THE REQUIREMENTS OF THE ODOT SECTION 6F.03, SECTION 2A.11 AND TABLE 6F.01. DETOUR SIGNING SHALL PROVIDE DRIVERS ADEQUATE TIME TO CLEARLY READ THE SIGNS AND MAKE THE PROPER DECISIONS AT EACH REQUIRED TURNING MOVEMENT. THE DESIGNATED DETOUR ROUTE SHALL BE SIGNED IN ACCORDANCE WITH THE REQUIREMENTS BELOW:

- APPROXIMATELY 1500 FEET PRIOR TO TIP OF THE PAINTED GORE AT AN INTERCHANGE WHEN EXITING A HIGH SPEED (45 MPH OR HIGHER) FACILITY.
- AT OR NEAR THE EXISTING SIGN IN THE GORE OF AN INTERCHANGE RAMP.
- AT OR NEAR THE FIRST EXISTING LANE ASSIGNMENT SIGN ON AN INTERCHANGE EXIT RAMP.
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT THE END OF AN EXIT RAMP.
- APPROXIMATELY 500 FEET PRIOR TO A REQUIRED TURN AT AN INTERSECTION NOT CONTROLLED BY A STOP SIGN (FOR 45 MPH OR HIGHER ONLY).
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT AN INTERSECTION.
- EVERY TWO MILES ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS OUTSIDE A CITY.
- EVERY TWO BLOCKS ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS WITHIN A CITY.
- AT ANY OTHER INTERSECTION OR DECISION POINT WHERE THE DETOUR ROUTE IS CONTRARY TO THE NORMAL, EXPECTED TURNING MANEUVER OR OTHERWISE UNCLEAR.

DETOUR SIGNS SHALL BE PLACED, WHEN POSSIBLE, NEXT TO BUT NOT BLOCKING EXISTING ROUTE MARKERS OR LANE ASSIGNMENT SIGNS. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.

DETOUR SIGNS SHALL BE ERECTED AND/OR UNCOVERED PRIOR TO THE ROAD OR RAMP BEING CLOSED TO TRAFFIC BUT NO EARLIER THAN FOUR HOURS PRIOR TO THE CLOSURE. DETOUR SIGNS SHALL BE COVERED AND/OR REMOVED NO LATER THAN FOUR HOURS FOLLOWING THE ROAD OR RAMP RE-OPENING TO TRAFFIC.

PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, PROPER SIGN PLACEMENT AND SIZING, TIMELY ERECTING AND/OR UNCOVERING OF SIGNS, MAINTAINING SIGNS, AND TIMELY COVERING AND/OR REMOVING SIGNS AND SUPPORTS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

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| ITEM 614, DETOUR SIGNING | LUMP |
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COORDINATION WITH ADJACENT PROJECTS

THE CONTRACTOR SHALL COORDINATE WORK WITH ODOT AND THE CONTRACTORS ON THE ADJACENT PROJECTS. COORDINATION SHALL BE MADE TO PREVENT CONFLICTING ADVANCE WARNING SIGNS, CONFLICTING DETOUR ROUTES, OVERLAPPING / CONFLICTING LANE CLOSURES AND TO ENSURE THAT A MINIMUM DISTANCE OF 2 MILES BETWEEN ADJACENT LANE CLOSURES. THIS IS NOT AN EXHAUSTIVE LIST OF COORDINATION ITEMS THAT MAY NEED TO BE RESOLVED BETWEEN PROJECTS. THE DEPARTMENT RESERVES THE RIGHT TO DECIDE WHICH PROJECT'S ACTIVITIES TAKE PRECEDENCE. PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS MAY BE EXCUSABLE BUT SHALL NOT BE COMPENSABLE. PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WHERE THE CONTRACTOR FAILED TO MEET THE NOTIFICATION REQUIREMENTS, THE DELAYS SHALL NOT BE EXCUSABLE OR COMPENSABLE.

PROJECTS: MAD-70-8.62 PID 107109

REMOVAL OF LOGO SIGNS

LOGO SIGNS (WHICH INCLUDE ESTABLISHMENTS FOR GAS, FOOD, LODGING, CAMPING, AND ATTRACTIONS) ARE THE PROPERTY OF OHIO LOGOS, INC. AND ARE NOT TO BE REMOVED OR REPLACED BY ODOT STAFF OR BY CONTRACTORS WORKING FOR ODOT. THE CONTRACTOR SHALL NOTIFY OHIO LOGOS (TOLL-FREE 1-800-860-LOGO) AT LEAST THIRTY DAYS PRIOR TO THE DATE OF DESIRED REMOVAL.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 1 M. GAL.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE (OFFICE OF MATERIALS MANAGEMENT WEB PAGE). THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 650 FEET AND 475 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH CMS 614.03.

PROBABLE PCMS LOCATIONS WILL BE IN ADVANCE OF ANY TEMPORARY TRAFFIC CONTROL ZONE SIGNING. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE. THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 18 SIGN MONTH

**RAMP CLOSURE RESTRICTIONS
INTERSTATE ROUTE 70 IN MADISON COUNTY**

| SECONDARY ROUTE: STATE ROUTE 29 | | | | | |
|---------------------------------|--------------------|---------------------|----------------|---|--|
| RAMP | MOVEMENT | NO CLOSURES ALLOWED | | DETOUR ROUTES | |
| | | MON-FRI | SAT-SUN | PRIMARY ROUTE | SECONDARY ROUTE |
| A | S.R. 29 TO I-70 WB | 6AM-9AM & 3PM-7PM | NO RESTRICTION | S.R. 29 WB TO U.S. 42 SB TO I-70 WB (RAMP A) | S.R. 29 EB TO U.S. 40 SB TO U.S. 42 NB TO I-70 WB (RAMP A) |
| B | I-70 WB TO S.R. 29 | 5AM-9PM | 8AM-7PM | I-70 WB TO U.S. 42 (RAMP B) TO U.S. 42 NB TO S.R. 29 | I-70 WB TO U.S. 42 (RAMP B) TO I-70 EB (RAMP C) TO S.R. 29 |
| C | S.R. 29 TO I-70 EB | 5AM-7PM | 8AM-7PM | I-70 WB (RAMP A) TO U.S. 42 (RAMP B) TO I-70 EB (RAMP C) | S.R. 29 EB TO U.S. 40 SB TO U.S. 42 NB TO I-70 EB (RAMP C) |
| D | I-70 EB TO S.R. 29 | 5AM-9AM & 3PM-6PM | NO RESTRICTION | I-70 EB TO PLAIN CITY GEORGEVILLE RD (RAMP D) TO I-70 WB (RAMP A) TO S.R. 29 (RAMP B) | I-70 EB TO HILLIARD-ROME RD (RAMP E) TO I-70 WB (RAMP A) TO S.R. 29 (RAMP B) |

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH

FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 500 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

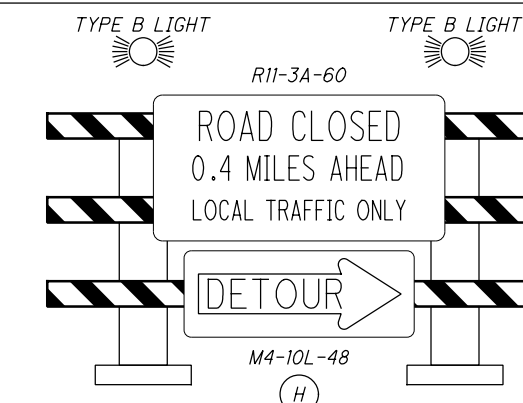
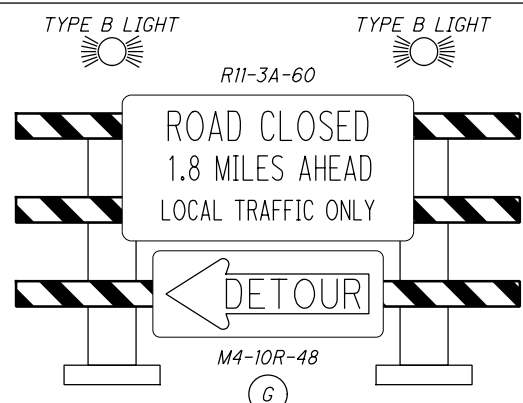
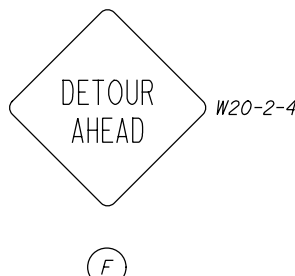
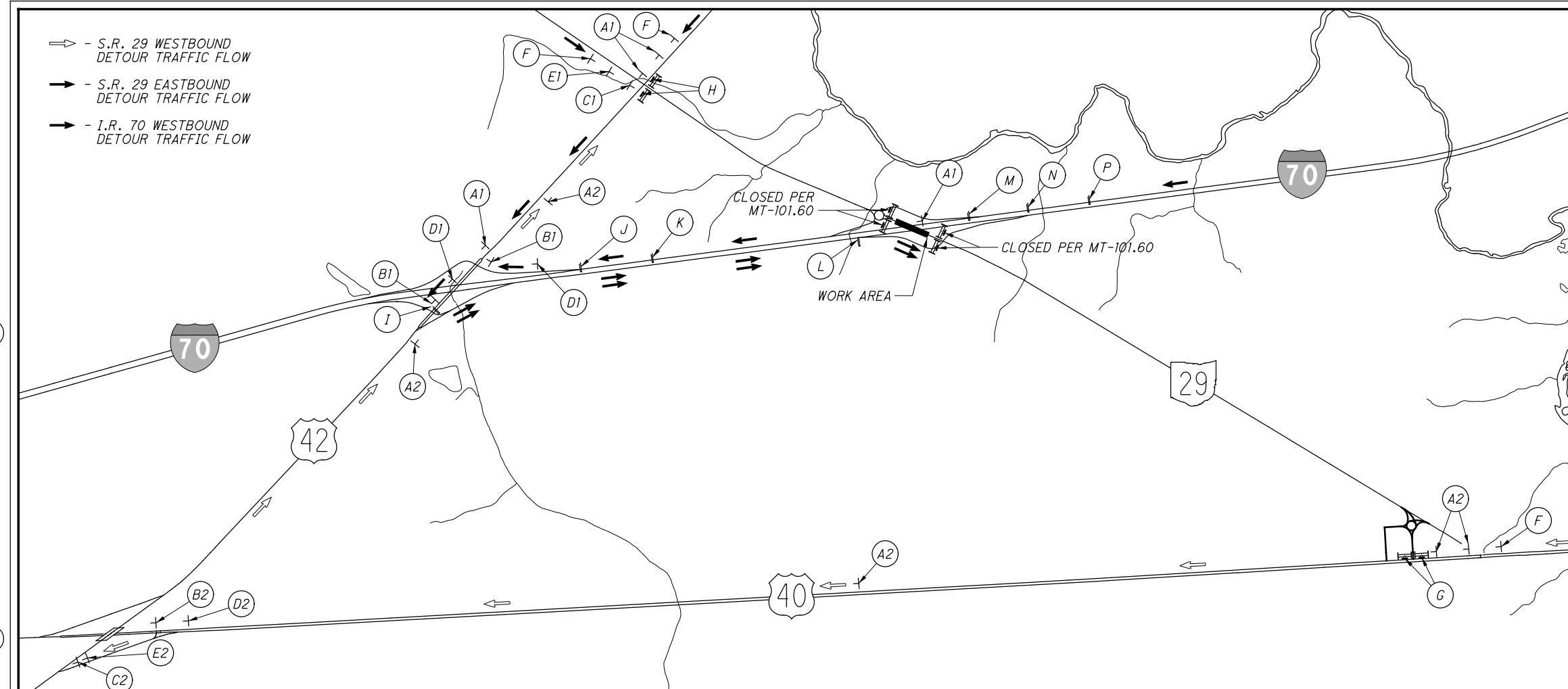
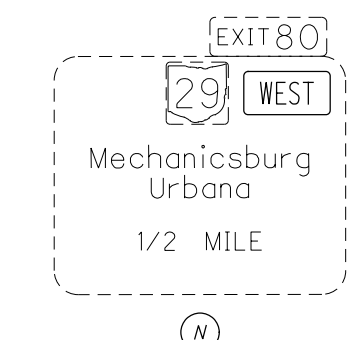
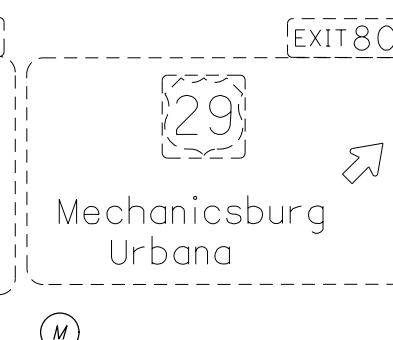
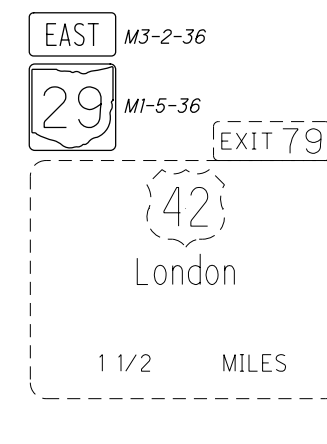
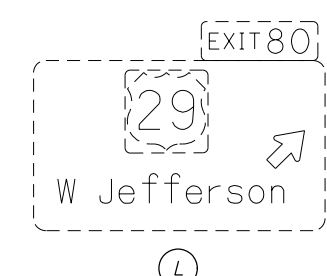
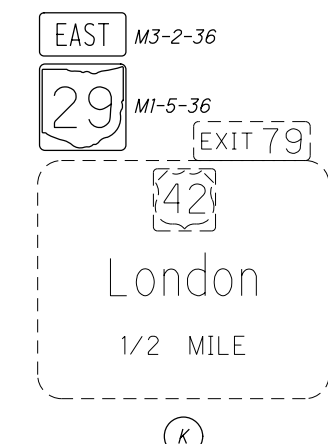
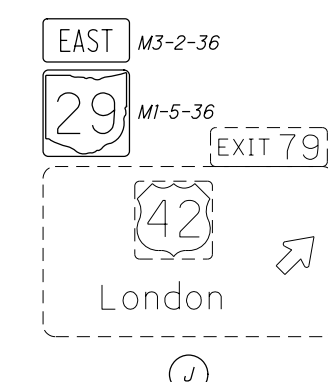
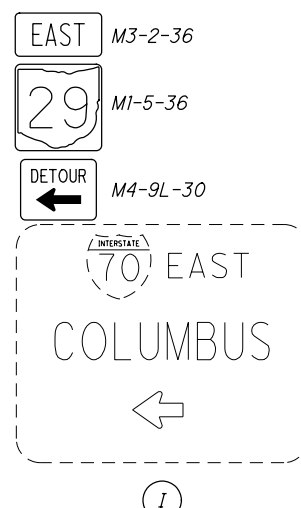
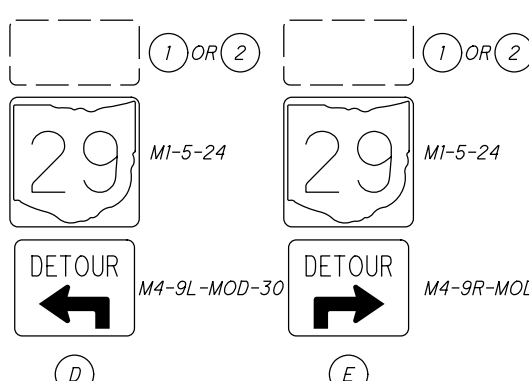
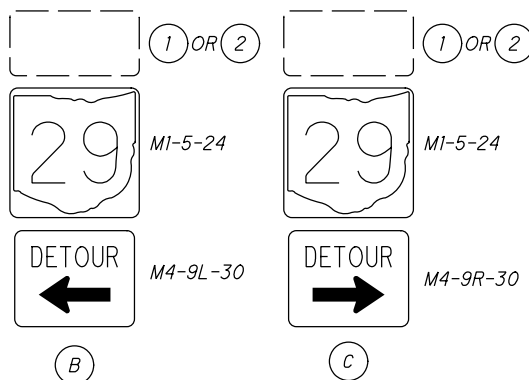
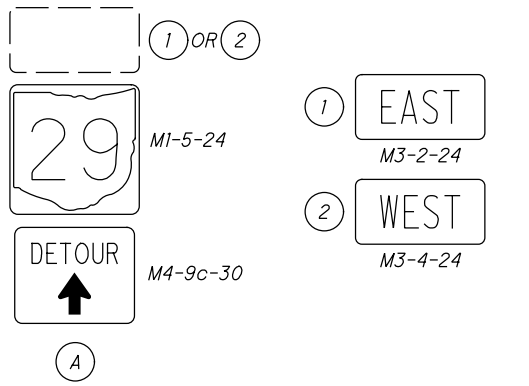
ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

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MAINTENANCE OF TRAFFIC GENERAL NOTES

MAD-29-10.61

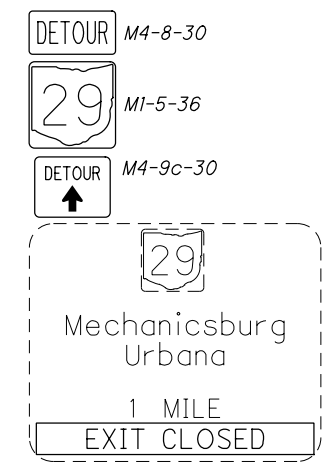
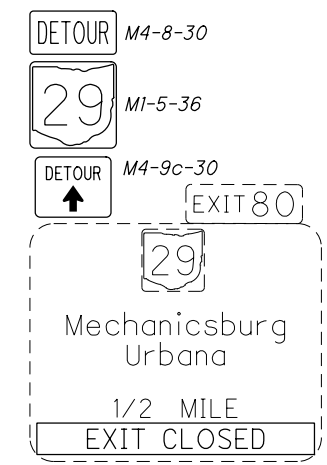
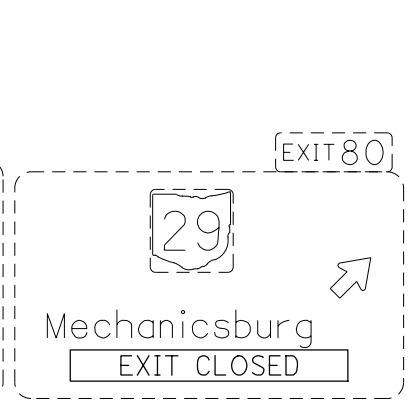
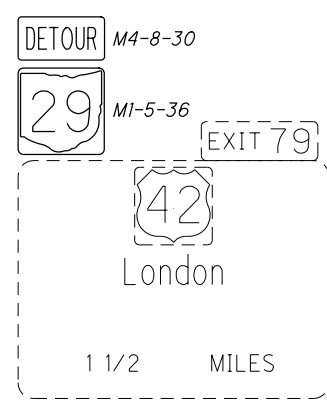
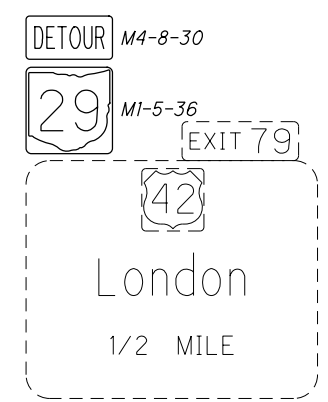
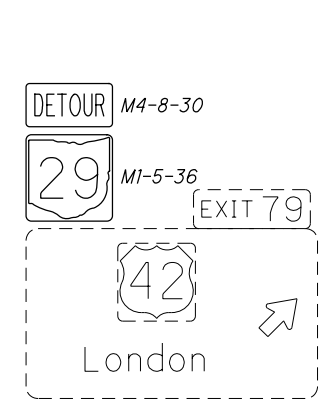
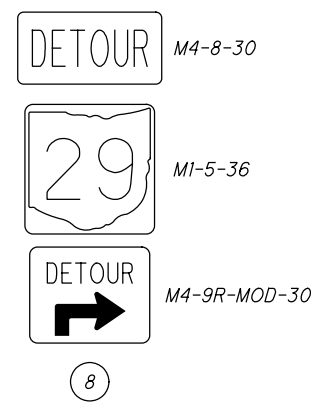
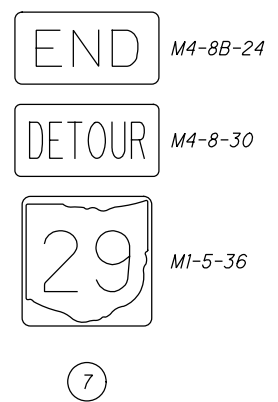
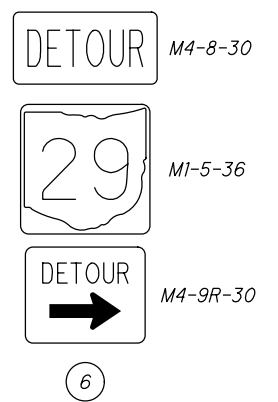
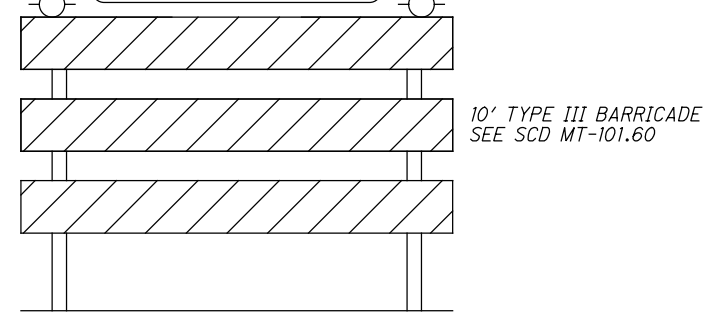
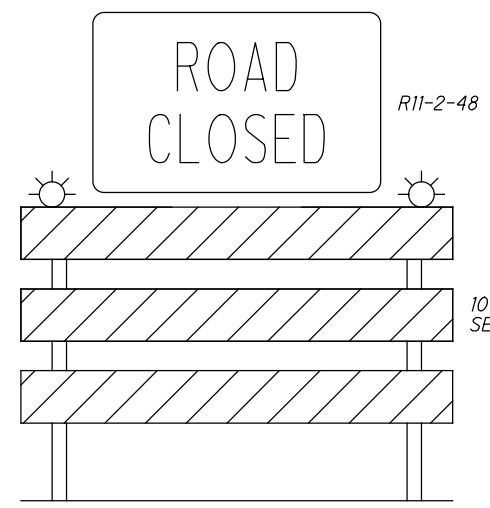
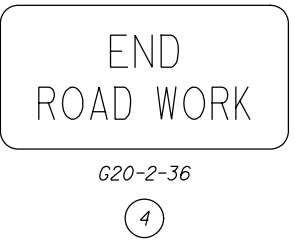
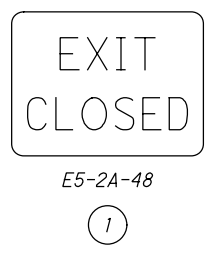
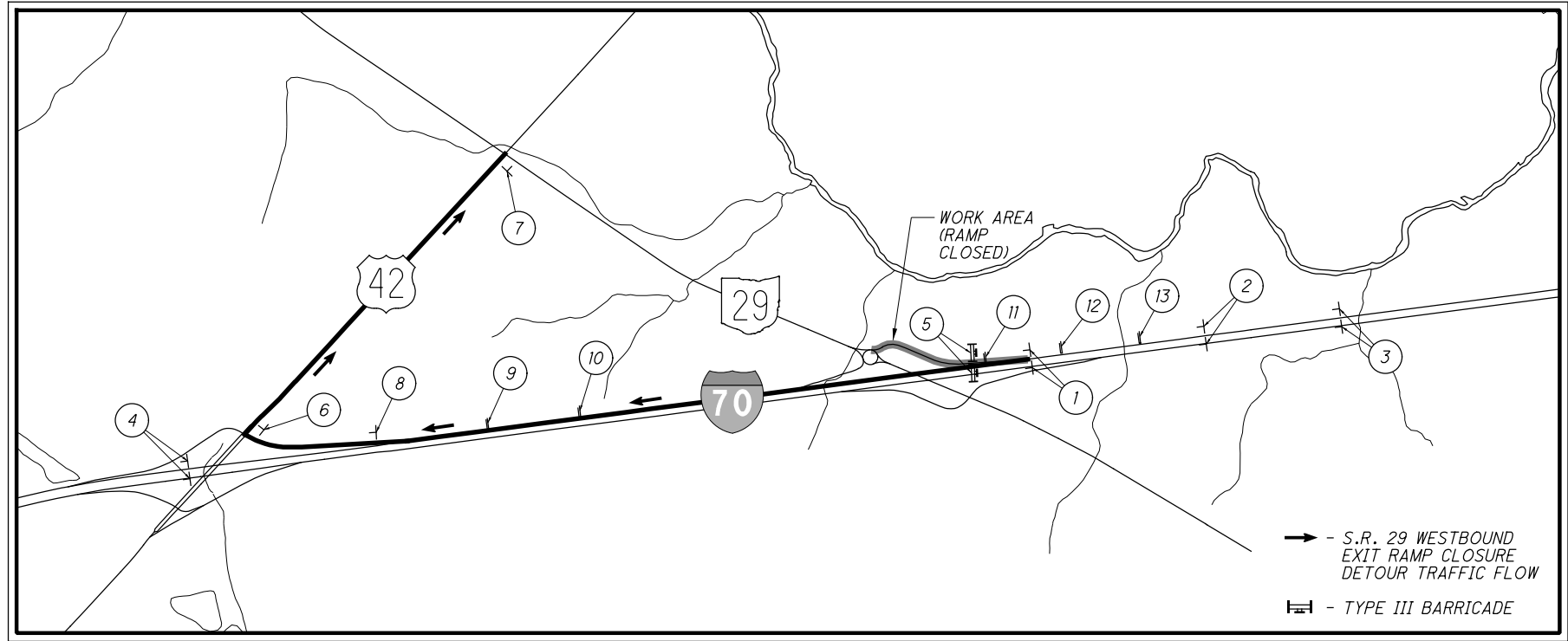
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MAINTENANCE OF TRAFFIC
DETOUR PLAN - S.R. 29

MAD-29-10.61
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CALCULATED GF CHECKED DWO
MAINTENANCE OF TRAFFIC
DETOUR PLAN - S.R. 29 RAMP B CLOSURE

| STATION RANGE | | | DISTANCE (D) | AVERAGE WIDTH (W) | ESTIMATED SURFACE AREA (A) A=DxW/9 | CADD GENERATED AREA | 204 | 252 | 255 | 301 | 304 | 407 | 441 | 442 | 442 | 442 | SPECIAL | 452 | |
|--|----|-----------|--------------|-------------------|---------------------------------------|---------------------|---------|-------|--------|--------|--------|--------|-------|--------|-------|-------|---------|--------|----|
| | | | FT | FT | SQ YD | SQ YD | SY | FT | FT | | CY | CY | | GAL | CY | CY | CY | CY | FT |
| S.R. 29 | | | | | | | | | | | | | | | | | | | |
| 558+55.00 | | | | | | | | 32.00 | | | | | | | | | | | |
| 558+55.00 | TO | 559+43.00 | 88.00 | 32.67 | 319.44 | | | | | | | | | | | | | 315.00 | |
| 558+55.00 | TO | 559+77.00 | 122.00 | 35.00 | 474.44 | 474.00 | | | | | | | | | | | | | |
| 558+64.00 | | | | | | | | | | | | | | | | | 64.00 | | |
| 565+18.00 | TO | 566+00.00 | 82.00 | 36.00 | 328.00 | 330.00 | | | | | | | | | | | | | |
| 565+53.00 | TO | 566+00.00 | 47.00 | 33.00 | 172.33 | | | | 59.00 | 174.00 | | 32.00 | 16.00 | | | | | | |
| 566+00.00 | | | | | | | | 32.00 | | | | | | | | | | | |
| RAMP B | | | | | | | | | | | | | | | | | | | |
| 46+50.00 | TO | 547+37.53 | 541.53 | 25.00 | 1504.25 | 1528.00 | | | 392.00 | 273.00 | | 253.00 | | 138.00 | 64.00 | 74.00 | | | |
| SUBTOTALS | | | | | | | 2332.00 | 32.00 | 32.00 | 451.00 | 447.00 | 285.00 | 16.00 | 138.00 | 64.00 | 74.00 | 64.00 | 315.00 | |
| TOTALS CARRIED TO GENERAL SUMMARY | | | | | | | 2332 | 32 | 32 | 451 | 447 | 285 | 16 | 138 | 64 | 74 | 64 | 315 | |

| | |
|-------------------------|----------------------|
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| | GF CHECKED DWO |

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| STATION | NOMINAL CUT | | NOMINAL FILL | | FOR INFORMATION ONLY | | 670 | |
|-------------------|-------------|--------|--------------|--------|----------------------|-------------|--------------------------|---------------|
| | END AREA | VOLUME | END AREA | VOLUME | EXCAVATION | EMBANKMENT | DITCH EROSION PROTECTION | |
| | | | | | | | END LENGTH | AREA |
| | SF | CF | SF | CF | | | CY | CY |
| 544+00.00 | 0.00 | | 0.00 | | | | 0.00 | |
| | | 56.50 | 0.00 | 0.00 | 2.09 | 0.00 | | 24.28 |
| 544+50.00 | 2.26 | | 0.00 | | | | 8.74 | |
| | | 255.00 | 0.00 | 0.00 | 9.44 | 0.00 | | 64.86 |
| 545+00.00 | 7.94 | | 0.00 | | | | 14.61 | |
| | | 347.50 | 0.00 | 0.00 | 12.87 | 0.00 | | 77.50 |
| 545+50.00 | 5.96 | | 0.00 | | | | 13.29 | |
| | | 248.25 | 0.00 | 0.00 | 9.19 | 0.00 | | 67.56 |
| 546+00.00 | 3.97 | | 0.00 | | | | 11.03 | |
| | | 172.00 | 0.00 | 0.00 | 6.37 | 0.00 | | 51.28 |
| 546+50.00 | 2.91 | | 0.00 | | | | 7.43 | |
| | | 128.00 | 0.00 | 0.00 | 4.74 | 0.00 | | 40.67 |
| 547+00.00 | 2.21 | | 0.00 | | | | 7.21 | |
| | | 119.25 | 0.00 | 0.00 | 4.42 | 0.00 | | 32.56 |
| 547+50.00 | 2.56 | | 0.00 | | | | 4.51 | |
| | | 110.75 | 0.00 | 0.00 | 4.10 | 0.00 | | 30.14 |
| 548+00.00 | 1.87 | | 0.00 | | | | 6.34 | |
| | | 147.75 | 0.00 | 0.00 | 5.47 | 0.00 | | 36.31 |
| 548+50.00 | 4.04 | | 0.00 | | | | 6.73 | |
| | | 166.25 | 0.00 | 0.00 | 6.16 | 0.00 | | 18.69 |
| 549+00.00 | 2.61 | | 0.00 | | | | 0.00 | |
| | | 162.00 | 0.00 | 0.00 | 6.00 | 0.00 | | 0.00 |
| 549+50.00 | 3.87 | | 0.00 | | | | 0.00 | |
| | | 201.00 | 0.00 | 0.00 | 7.44 | 0.00 | | 0.00 |
| 550+00.00 | 4.17 | | 0.00 | | | | 0.00 | |
| | | 211.25 | 0.00 | 0.00 | 7.82 | 0.00 | | 0.00 |
| 550+50.00 | 4.28 | | 0.00 | | | | 0.00 | |
| | | 258.50 | 0.00 | 0.00 | 9.57 | 0.00 | | 0.00 |
| 551+00.00 | 6.06 | | 0.00 | | | | 0.00 | |
| | | 258.75 | 0.00 | 0.00 | 9.58 | 0.00 | | 0.00 |
| 551+50.00 | 4.29 | | 0.00 | | | | 0.00 | |
| | | 208.25 | 0.00 | 0.00 | 7.71 | 0.00 | | 0.00 |
| 552+00.00 | 4.04 | | 0.00 | | | | 0.00 | |
| | | 239.75 | 0.00 | 0.00 | 8.88 | 0.00 | | 0.00 |
| 552+50.00 | 5.55 | | 0.00 | 28.25 | 6.66 | 1.05 | 0.00 | 10.58 |
| | | 179.75 | | | | | 3.81 | |
| 553+00.00 | 1.64 | | 1.13 | | | | | |
| | | 133.50 | | 28.25 | 4.94 | 1.05 | | 10.58 |
| 553+50.00 | 3.70 | | 0.00 | | | | 0.00 | |
| | | 169.75 | 0.00 | 0.00 | 6.29 | 0.00 | | 0.00 |
| 554+00.00 | 3.09 | | 0.00 | | | | 0.00 | |
| | | 169.75 | 0.00 | 0.00 | 6.29 | 0.00 | | 0.00 |
| 554+50.00 | 3.70 | | 0.00 | | | | 0.00 | |
| | | 182.25 | 0.00 | 0.00 | 6.75 | 0.00 | | 13.17 |
| 555+00.00 | 3.59 | | 0.00 | | | | 4.74 | |
| | | 171.50 | 0.00 | 0.00 | 6.35 | 0.00 | | 31.28 |
| 555+50.00 | 3.27 | | 0.00 | | | | 6.52 | |
| | | 132.00 | 0.00 | 0.00 | 4.89 | 0.00 | | 42.36 |
| 556+00.00 | 2.01 | | 0.00 | | | | 8.73 | |
| | | 80.00 | 0.00 | 0.00 | 2.96 | 0.00 | | 33.25 |
| 556+50.00 | 1.19 | | 0.00 | | | | 3.24 | |
| | | 56.00 | 0.00 | 0.00 | 2.07 | 0.00 | | 30.58 |
| 557+00.00 | 1.05 | | 0.00 | | | | 7.77 | |
| | | 54.25 | 0.00 | 0.00 | 2.01 | 0.00 | | 39.53 |
| 557+50.00 | 1.12 | | 0.00 | | | | 6.46 | |
| | | 65.75 | 0.00 | 0.00 | 2.44 | 0.00 | | 40.19 |
| 558+00.00 | 1.51 | | 0.00 | | | | 8.01 | |
| | | 76.00 | 0.00 | 0.00 | 2.81 | 0.00 | | 46.22 |
| 558+50.00 | 1.53 | | | | | | 8.63 | |
| | | 57.25 | 0.00 | 0.00 | 2.12 | 0.00 | | 46.08 |
| SUBTOTAL A | | | | | 178.46 | 2.09 | | 787.67 |

| STATION | NOMINAL CUT | | NOMINAL FILL | | FOR INFORMATION ONLY | | 670 | |
|---|-------------|--------|--------------|--------|----------------------|-------------|--------------------------|----------------|
| | END AREA | VOLUME | END AREA | VOLUME | EXCAVATION | EMBANKMENT | DITCH EROSION PROTECTION | |
| | | | | | | | END LENGTH | AREA |
| | SF | CF | SF | CF | | | CY | CY |
| 559+00.00 | 0.76 | | 0.00 | | | | 7.96 | |
| | | 79.75 | 0.00 | 0.00 | 2.95 | 0.00 | | 45.78 |
| 559+50.00 | 2.43 | | 0.00 | | | | 8.52 | |
| | | 115.50 | 0.00 | 0.00 | 4.28 | 0.00 | | 46.06 |
| 560+00.00 | 2.19 | | 0.00 | | | | 8.06 | |
| | | 110.25 | 0.00 | 0.00 | 4.08 | 0.00 | | 47.50 |
| 560+50.00 | 2.22 | | 0.00 | | | | 9.04 | |
| | | 151.25 | 0.00 | 0.00 | 5.60 | 0.00 | | 48.67 |
| 561+00.00 | 3.83 | | 0.00 | | | | 8.48 | |
| | | 177.25 | 0.00 | 0.00 | 6.56 | 0.00 | | 50.81 |
| 561+50.00 | 3.26 | | 0.00 | | | | 9.81 | |
| | | 186.25 | 0.00 | 0.00 | 6.90 | 0.00 | | 52.72 |
| 562+00.00 | 4.19 | | 0.00 | | | | 9.17 | |
| | | 192.75 | 0.00 | 0.00 | 7.14 | 0.00 | | 56.47 |
| 562+50.00 | 3.52 | | 0.00 | | | | 11.16 | |
| | | 212.75 | 0.00 | 0.00 | 7.88 | 0.00 | | 62.69 |
| 563+00.00 | 4.99 | | 0.00 | | | | 11.41 | |
| | | 273.25 | 0.00 | 0.00 | 10.12 | 0.00 | | 64.67 |
| 563+50.00 | 5.94 | | 0.00 | | | | 11.87 | |
| | | 296.00 | 0.00 | 0.00 | 10.96 | 0.00 | | 67.06 |
| 564+00.00 | 5.90 | | 0.00 | | | | 12.27 | |
| | | 300.50 | 0.00 | 0.00 | 11.13 | 0.00 | | 65.97 |
| 564+50.00 | 6.12 | | 0.00 | | | | 11.48 | |
| | | 297.00 | 0.00 | 0.00 | 11.00 | 0.00 | | 68.58 |
| 565+00.00 | 5.76 | | 0.00 | | | | 13.21 | |
| | | 259.50 | 0.00 | 0.00 | 9.61 | 0.00 | | 68.81 |
| 565+50.00 | 4.62 | | 0.00 | | | | 11.56 | |
| | | 227.50 | 0.00 | 0.00 | 8.43 | 0.00 | | 59.92 |
| 566+00.00 | 4.48 | | 0.00 | | | | 10.01 | |
| | | 219.50 | 0.00 | 0.00 | 8.13 | 0.00 | | 54.89 |
| 566+50.00 | 4.30 | | 0.00 | | | | 9.75 | |
| | | 212.00 | 0.00 | 0.00 | 7.85 | 0.00 | | 54.75 |
| 567+00.00 | 4.18 | | 0.00 | | | | 9.96 | |
| | | 276.50 | 0.00 | 0.00 | 10.24 | 0.00 | | 54.61 |
| 567+50.00 | 6.88 | | 0.00 | | | | 9.70 | |
| | | 172.00 | 0.00 | 0.00 | 6.37 | 0.00 | | 26.94 |
| 568+00.00 | 0.00 | | 0.00 | | | | 0.00 | |
| SUBTOTAL B | | | | | 139.24 | 0.00 | | 996.89 |
| SUBTOTAL A | | | | | 178.46 | 2.09 | | 787.67 |
| SUBTOTAL B | | | | | 139.24 | 0.00 | | 996.89 |
| GRAND TOTAL FOR INFORMATION ONLY | | | | | 317.70 | 2.09 | | |
| GRAND TOTAL CARRIED TO GENERAL SUMMARY | | | | | | | | 1784.56 |

CALCULATED GF CHECKED DWO
MAD - 29 - 10.61
 16
 76

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LEGEND
 X TREE REMOVED

NOTE: THE LIMITS OF DITCH CLEANOUT WORK REQUIRE DITCH EROSION PROTECTION.
 ITEM 670 - DITCH EROSION PROTECTION 1,785 SY

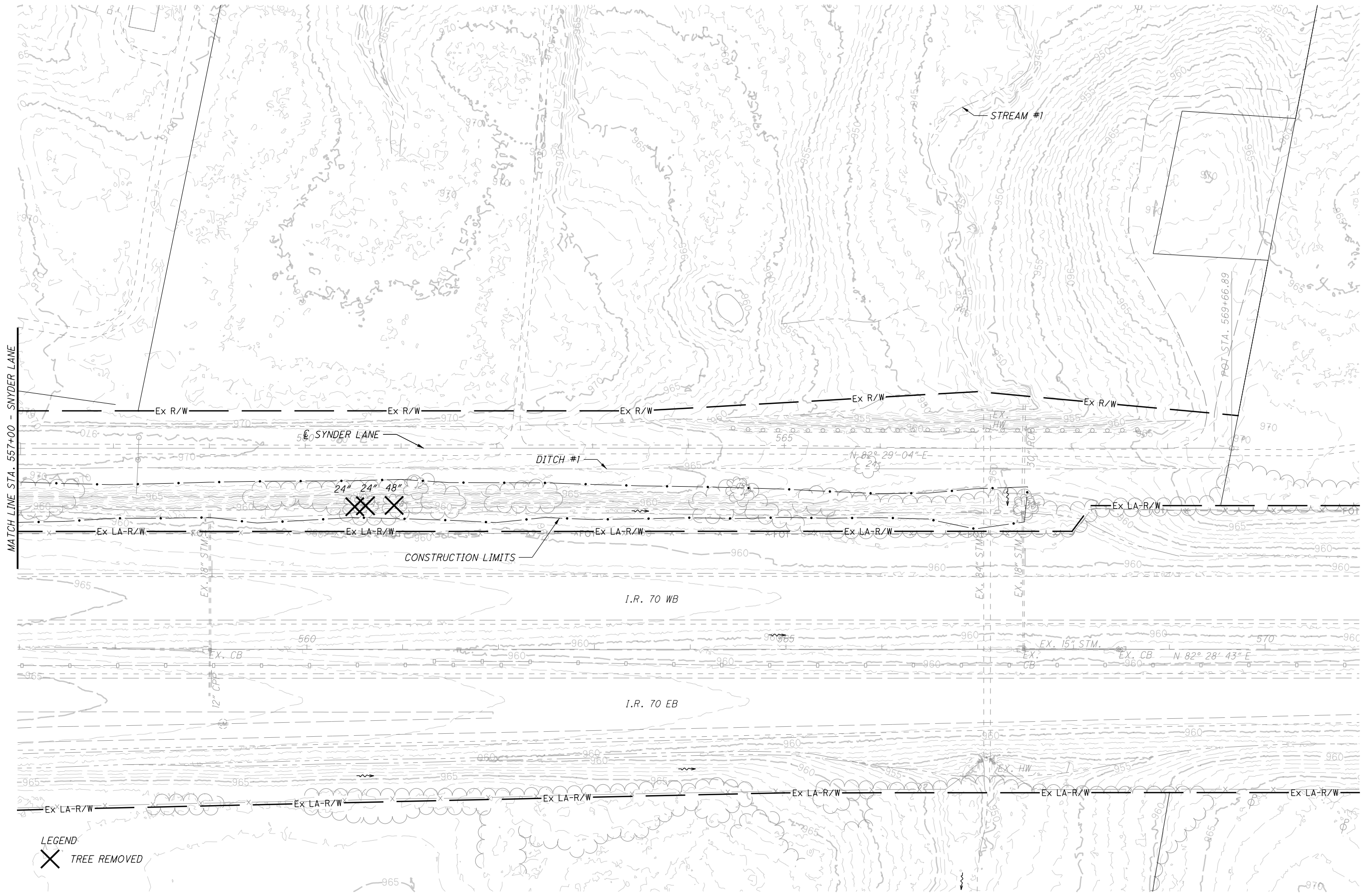


CALCULATED GF
 CHECKED DWO
 0 100 200
 HORIZONTAL SCALE IN FEET

PLAN - CHANNEL
 STA. 544+00.00 TO STA. 557+00.00

MAD-29-10.61

17
 76

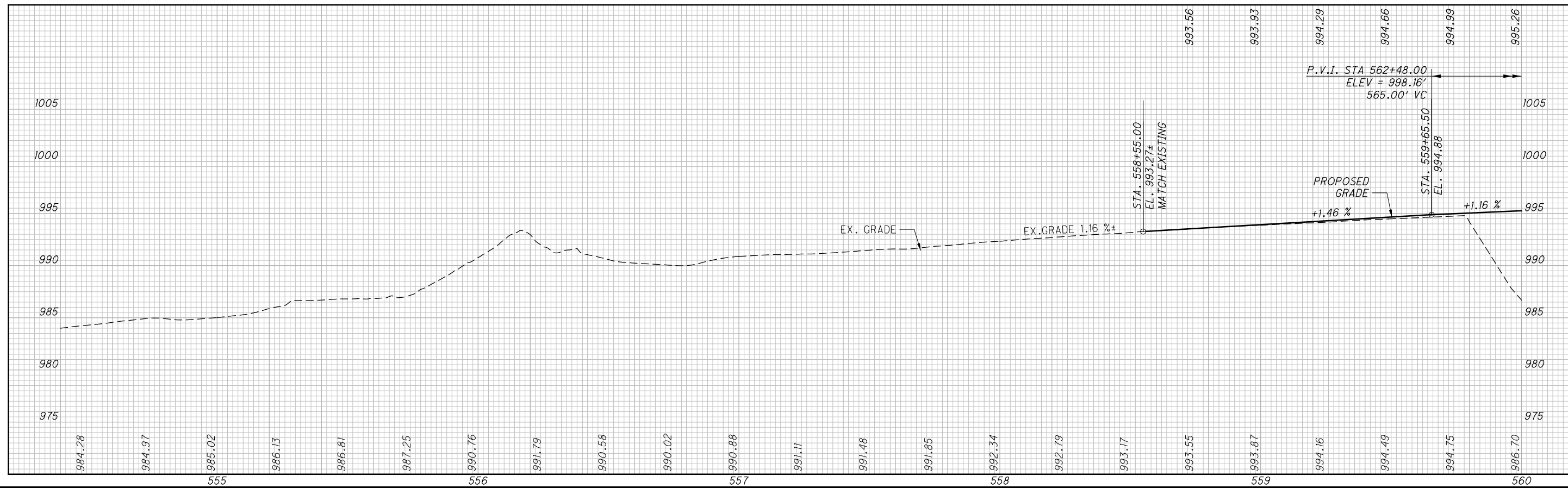
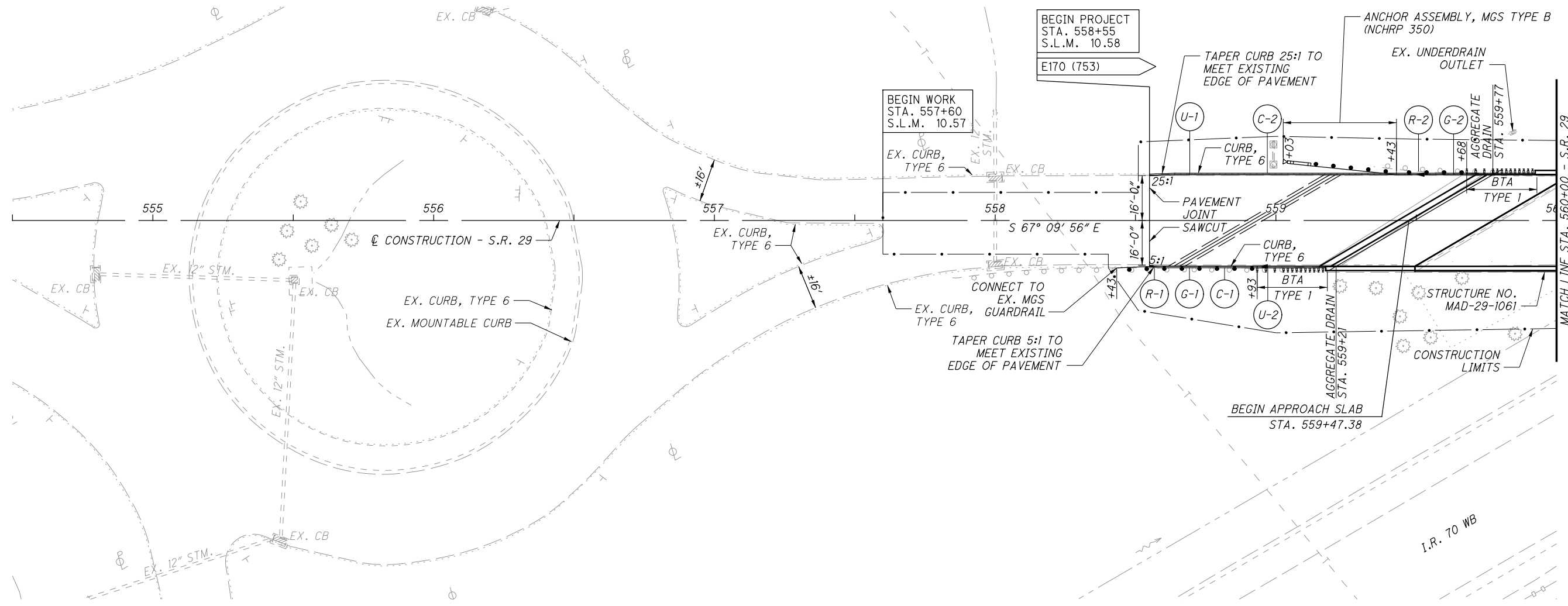


CALCULATED 0
 GF 25
 CHECKED 100
 DWO

HORIZONTAL SCALE IN FEET

PLAN - CHANNEL
STA. 557+00.00 TO STA. 568+00.00

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PLAN AND PROFILE - S.R. 29
STA. 554+50 TO STA. 560+00

MAD-29-10.61

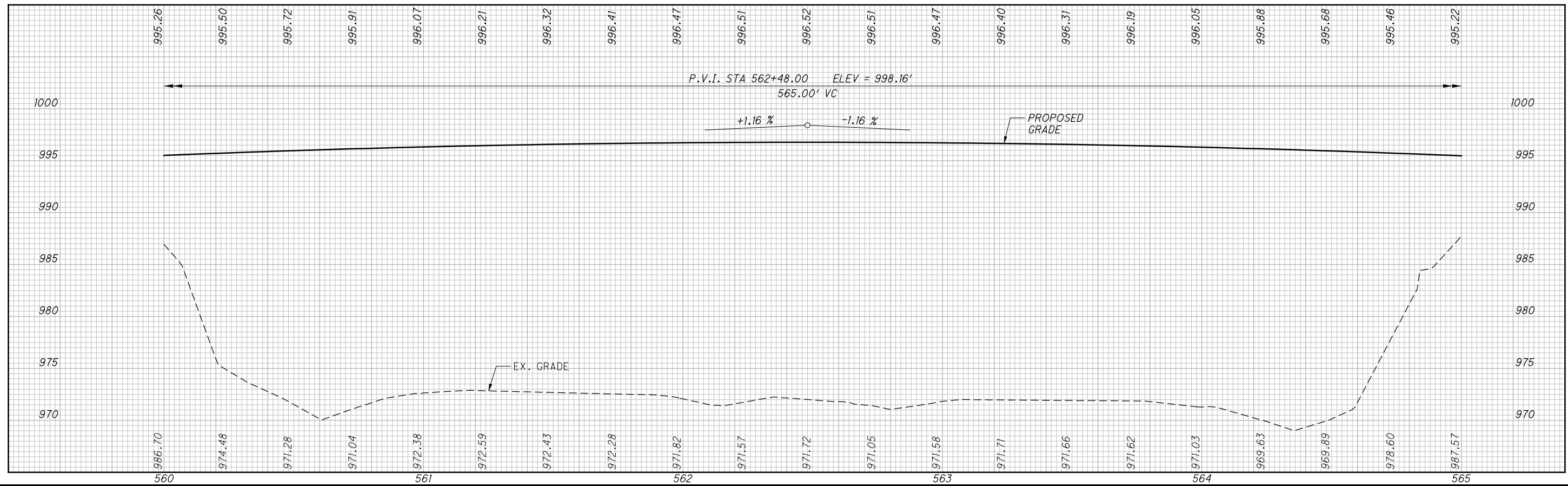
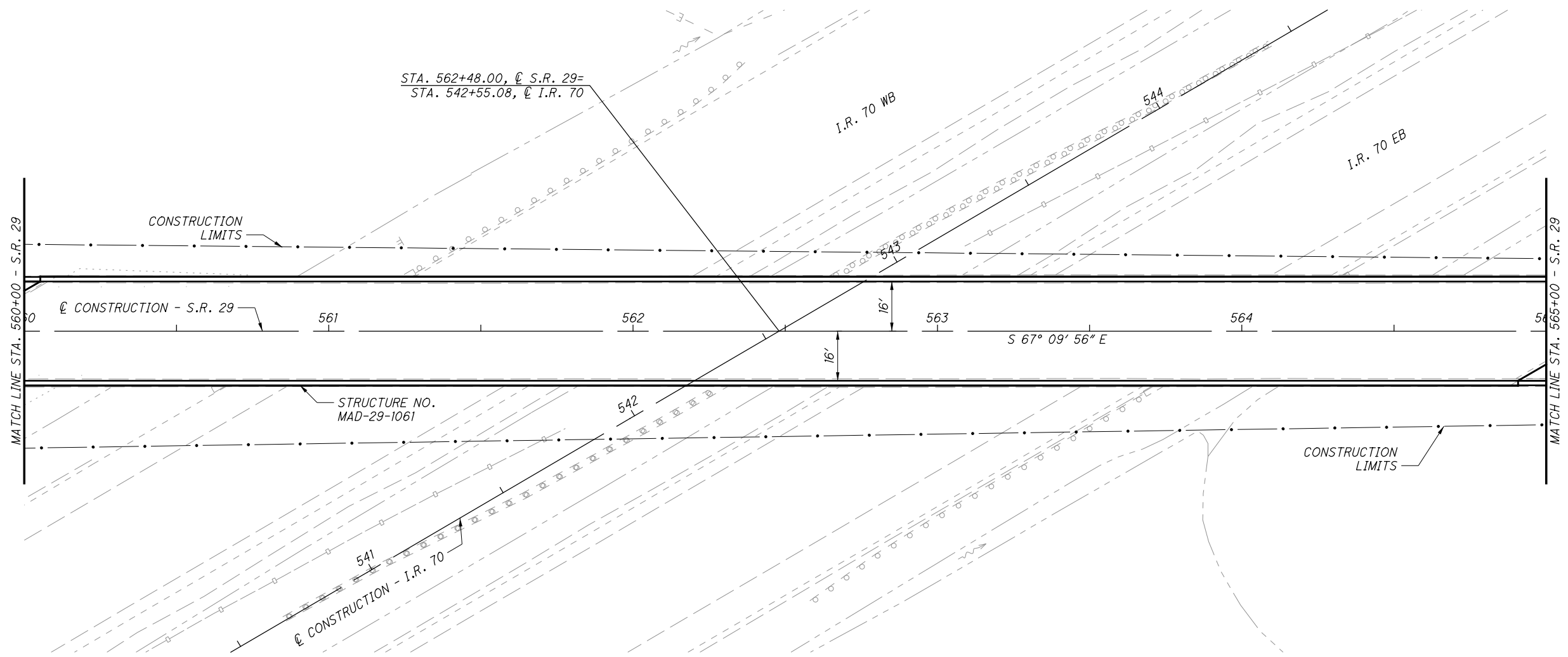
CALCULATED
GF

CHECKED
DWO

0 20 40
HORIZONTAL
SCALE IN FEET

10
76

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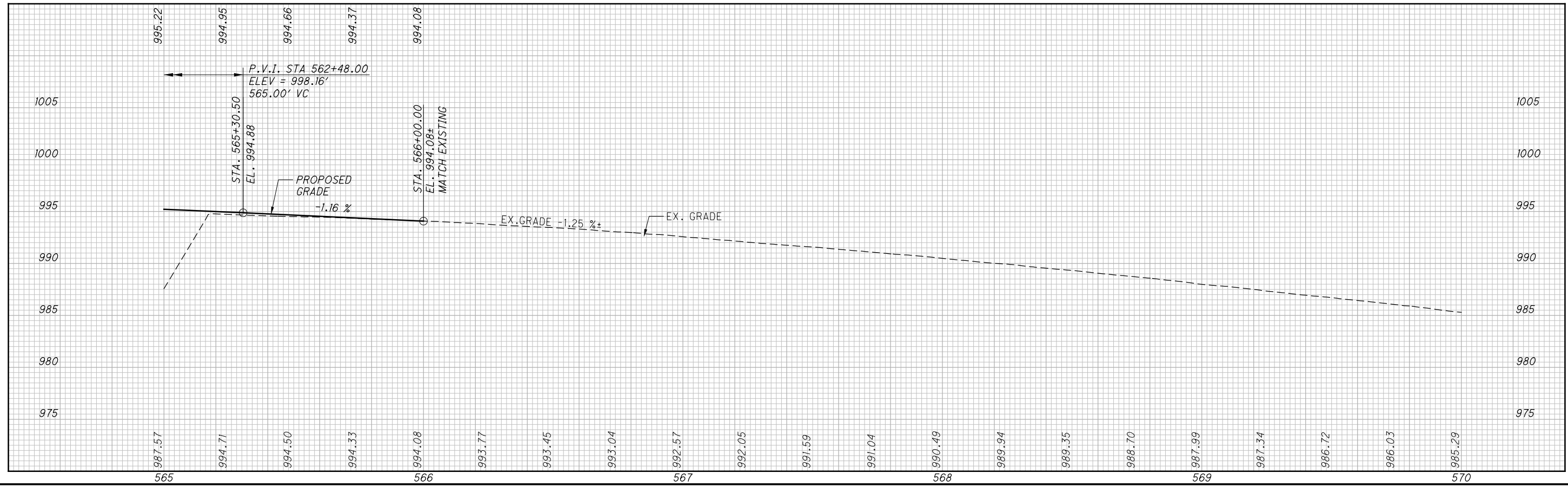
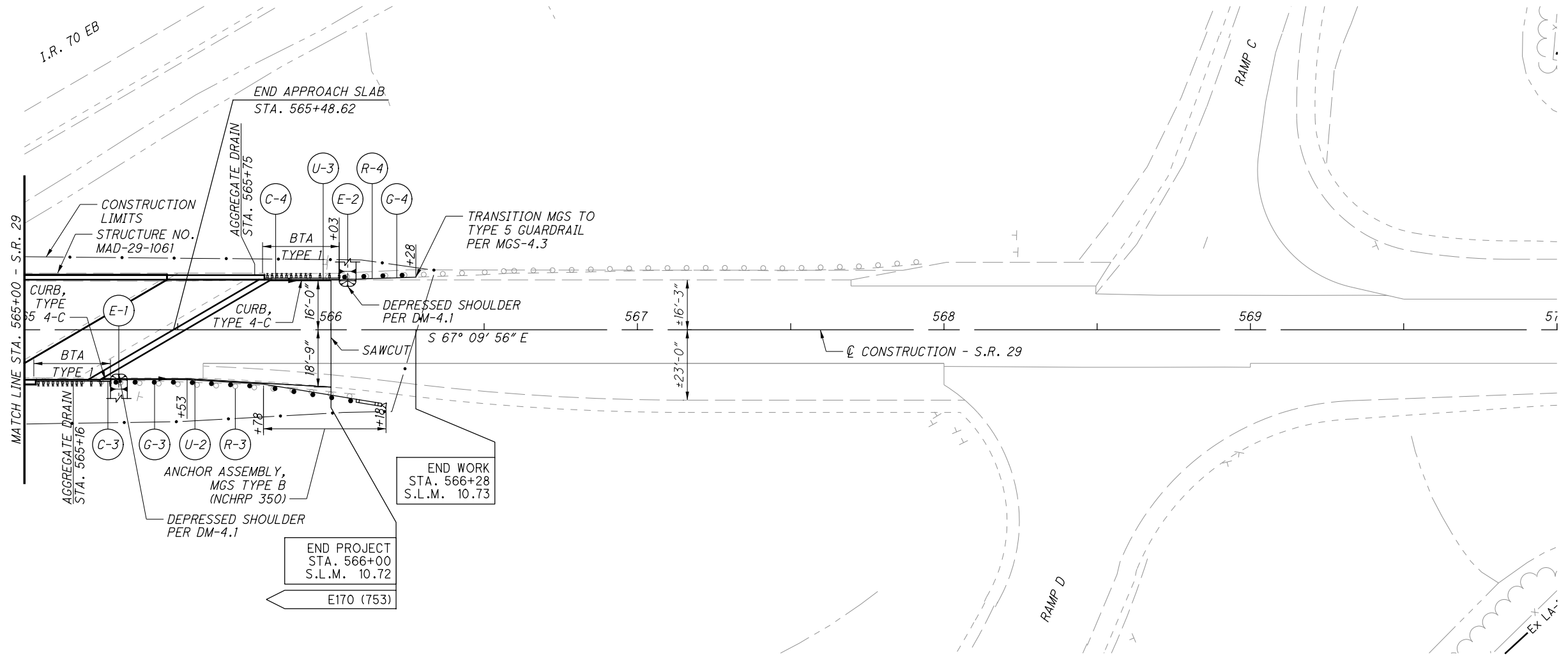


PLAN AND PROFILE - S.R. 29
STA. 560+00 TO STA. 565+00

MAD-29-10.61

20
 76

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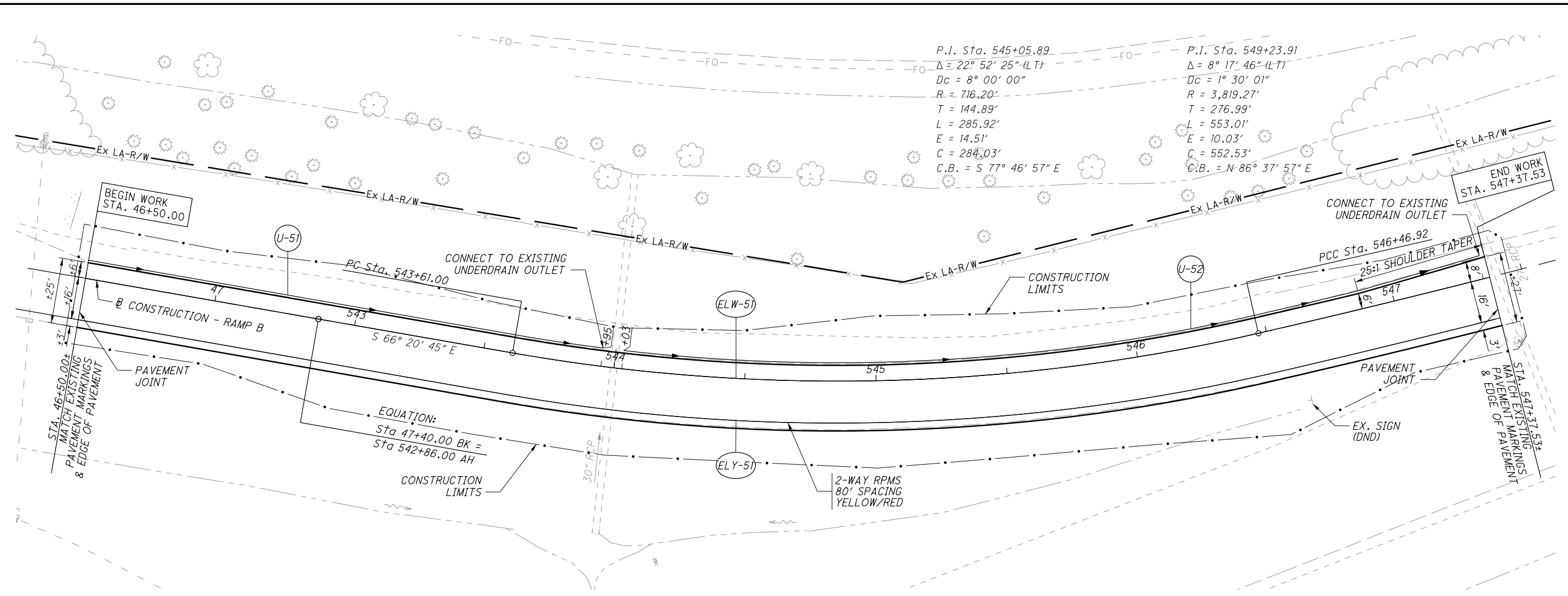


CALCULATED
GF
CHECKED
DWO

PLAN AND PROFILE - S.R. 29
STA. 565+00 TO STA. 570+00

MAD-29-10.61

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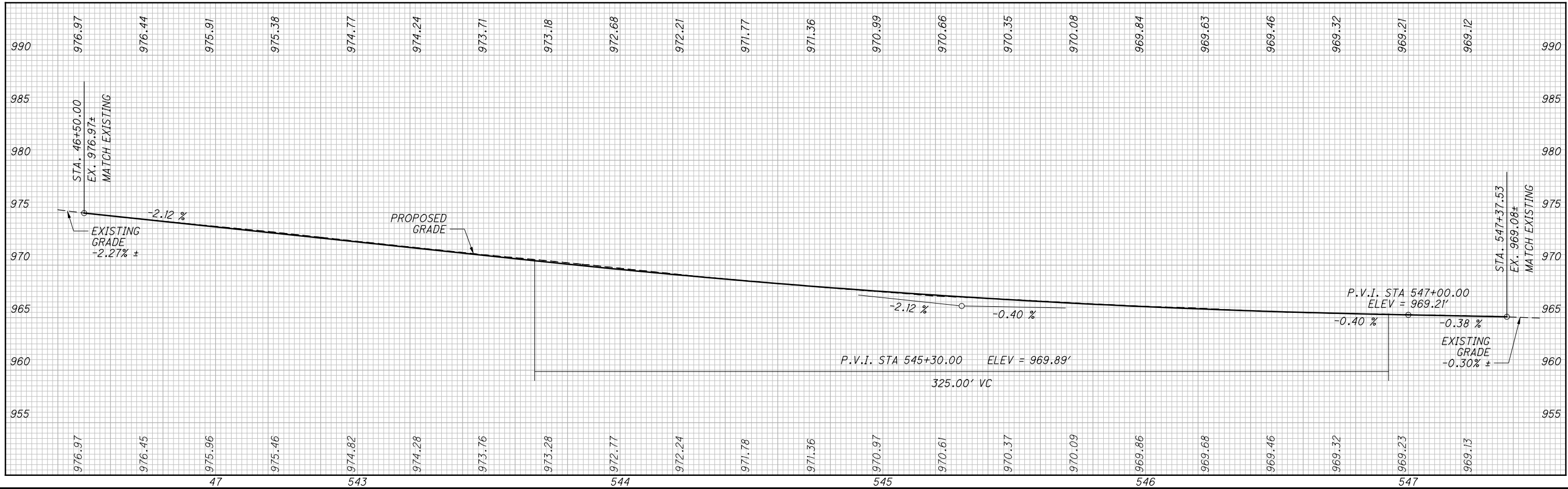


P.I. Sta. 545+05.89
 $\Delta = 22^\circ 52' 25''$ (LT)
 $D_c = 8^\circ 00' 00''$
 $R = 716.20'$
 $T = 144.89'$
 $L = 285.92'$
 $E = 14.51'$
 $C = 284.03'$
 $C.B. = S 77^\circ 46' 57'' E$

P.I. Sta. 549+23.91
 $\Delta = 8^\circ 17' 46''$ (LT)
 $D_c = 1^\circ 30' 01''$
 $R = 3,819.27'$
 $T = 276.99'$
 $L = 553.01'$
 $E = 10.03'$
 $C = 552.53'$
 $C.B. = N 86^\circ 37' 57'' E$



CALCULATED GF
 CHECKED DWO
PLAN AND PROFILE - RAMP B
STA. 46+50.00 TO STA. 547+37.53

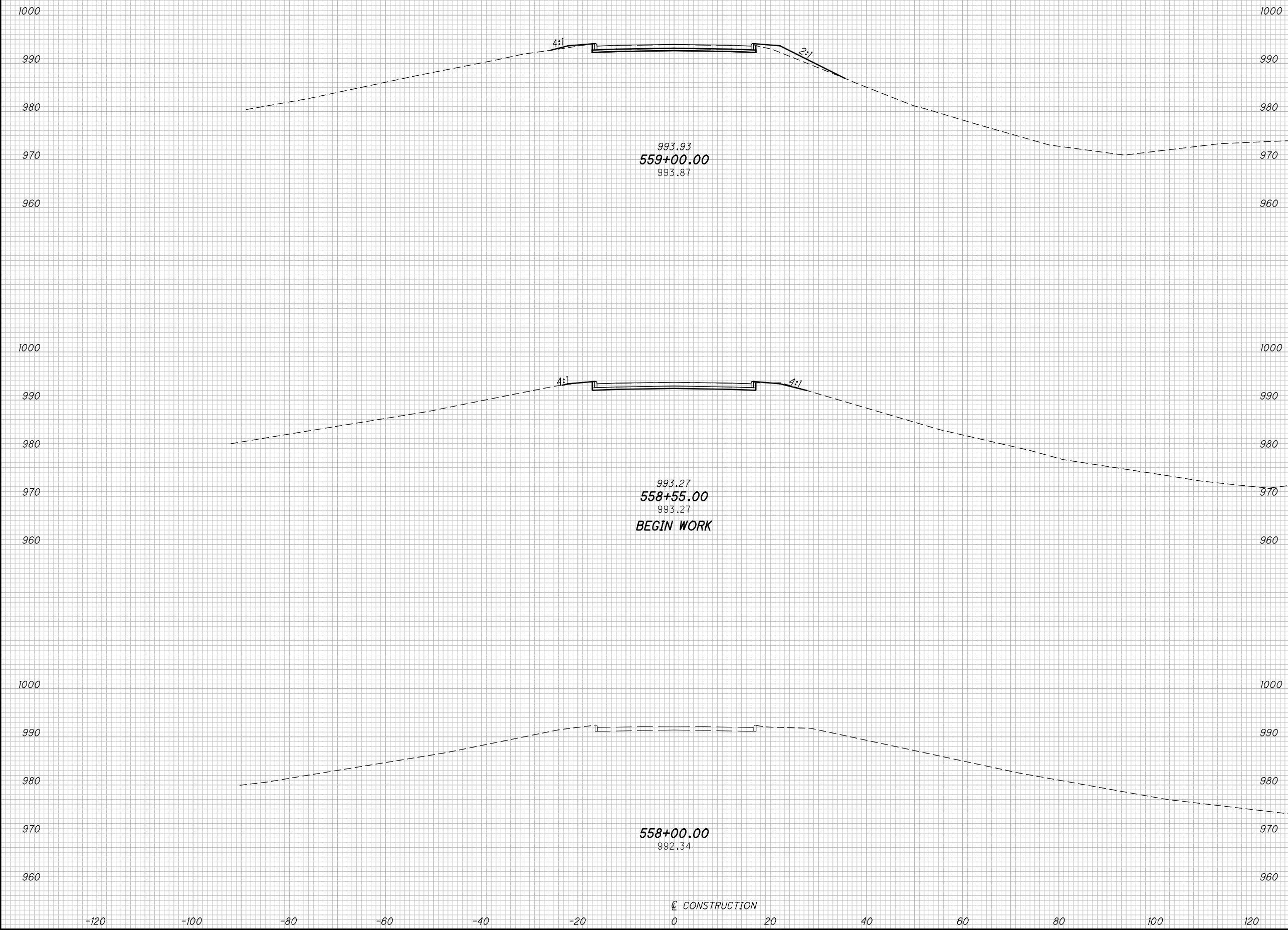


MAD-29-10.61
 22
 76

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SEE GENERAL NOTES SHEET

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |



| END AREA | | VOLUME | |
|----------|------|--------|------|
| CUT | FILL | CUT | FILL |
| 16 | 16 | 30 | 15 |
| 19 | 2 | 0 | 0 |
| 0 | 0 | 30 | 15 |

| CALCULATED GF | CHECKED DWO |
|---------------|-------------|
| | |

**CROSS SECTIONS - S.R. 29
STA. 558+00.00 TO STA. 559+00.00**

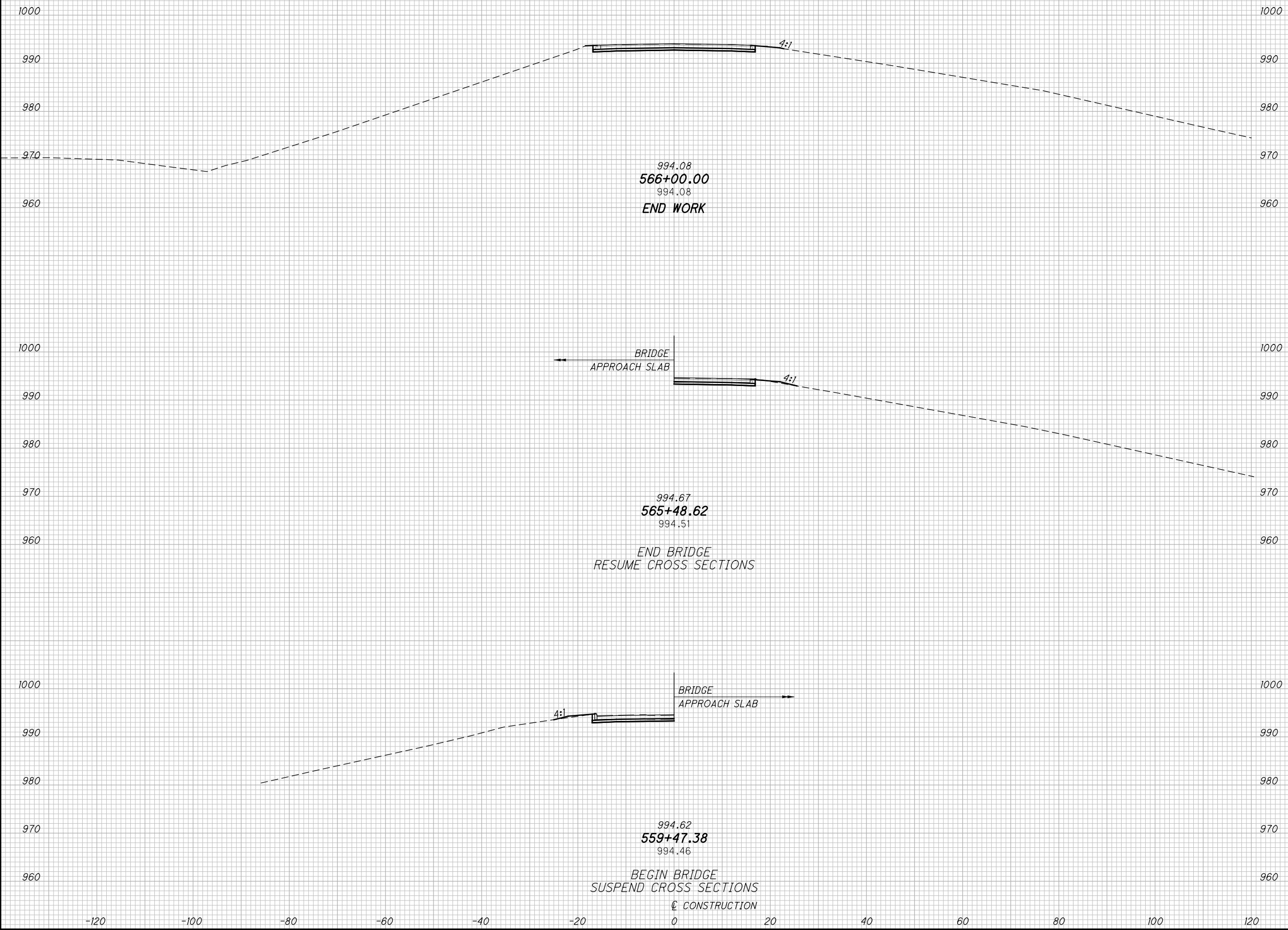
MAD-29-10.61

23
76

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SEE GENERAL NOTES SHEET

SEEDING
END SO.
WIDTH YDS.



| END AREA | | VOLUME | | CALCULATED GF | CHECKED DWO |
|----------|------|--------|------|---------------|-------------|
| CUT | FILL | CUT | FILL | | |
| 19 | 2 | | | | |
| 9 | 2 | 27 | 4 | | |
| 9 | 2 | 0 | 0 | | |
| | | 22 | 16 | | |
| | | 49 | 20 | | |

CROSS SECTIONS - S.R. 29
STA. 559+47.38 TO STA. 566+00.00

MAD-29-10.61

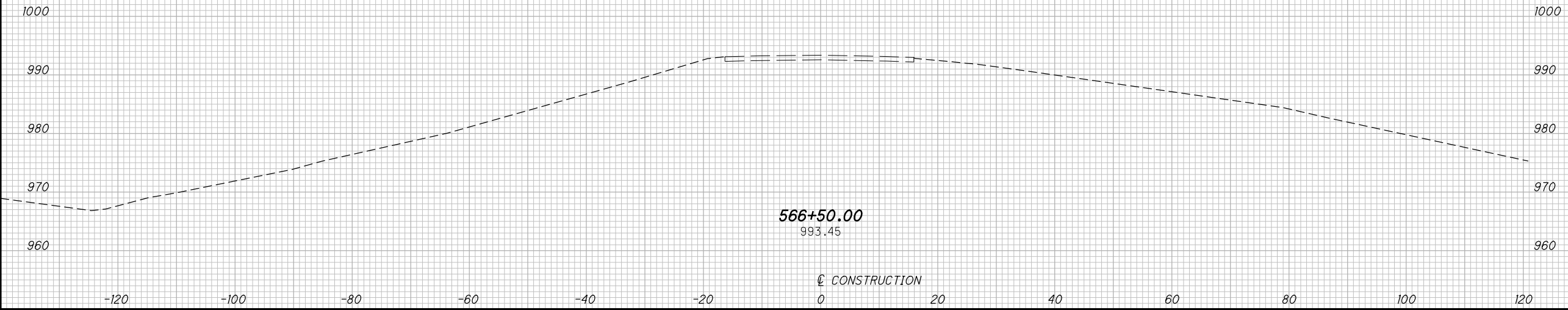
24
76

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SEE GENERAL NOTES SHEET

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |

| END AREA | | VOLUME | | CALCULATED GF | CHECKED DWO |
|----------|------|--------|------|---------------|-------------|
| CUT | FILL | CUT | FILL | | |



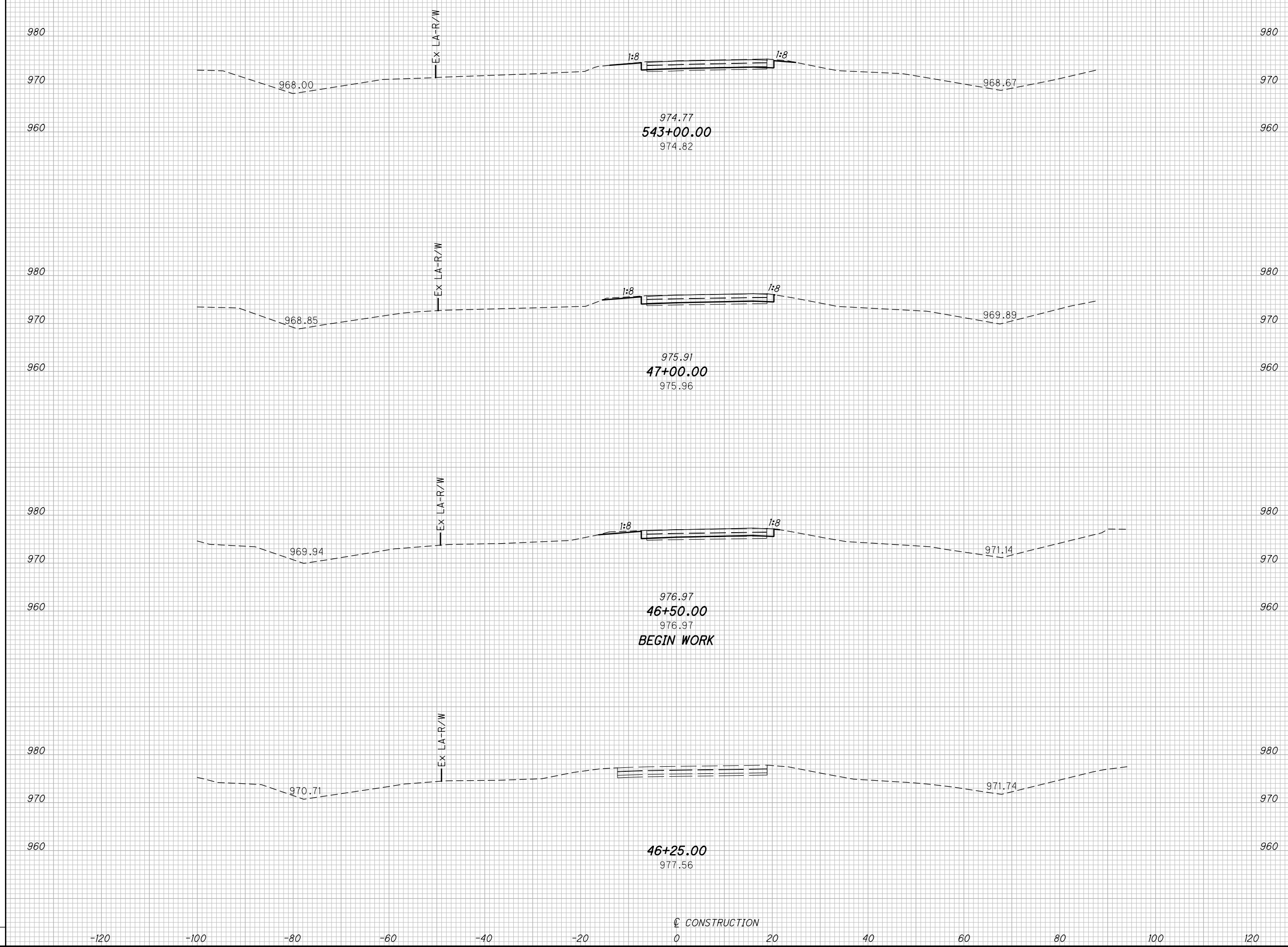
| | | | | | | | |
|---|---|--|--|--|--|----|----|
| 0 | 0 | | | | | | |
| CROSS SECTIONS - S.R. 29 | | | | | | | |
| STA. 565+50.00 | | | | | | | |
| MAD - 29 - 10.61 | | | | | | | |
| <table border="1"> <tr> <td>25</td> </tr> <tr> <td>76</td> </tr> </table> | | | | | | 25 | 76 |
| 25 | | | | | | | |
| 76 | | | | | | | |

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| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |

SEE SHEET 15

| END AREA | | VOLUME | | CALCULATED GF | CHECKED DWO |
|----------|------|--------|------|---------------|-------------|
| CUT | FILL | CUT | FILL | | |
| | | | | | |



SEE SHEET 15

CROSS SECTIONS - RAMP B
STA. 46+25.00 TO STA. 543+00.00

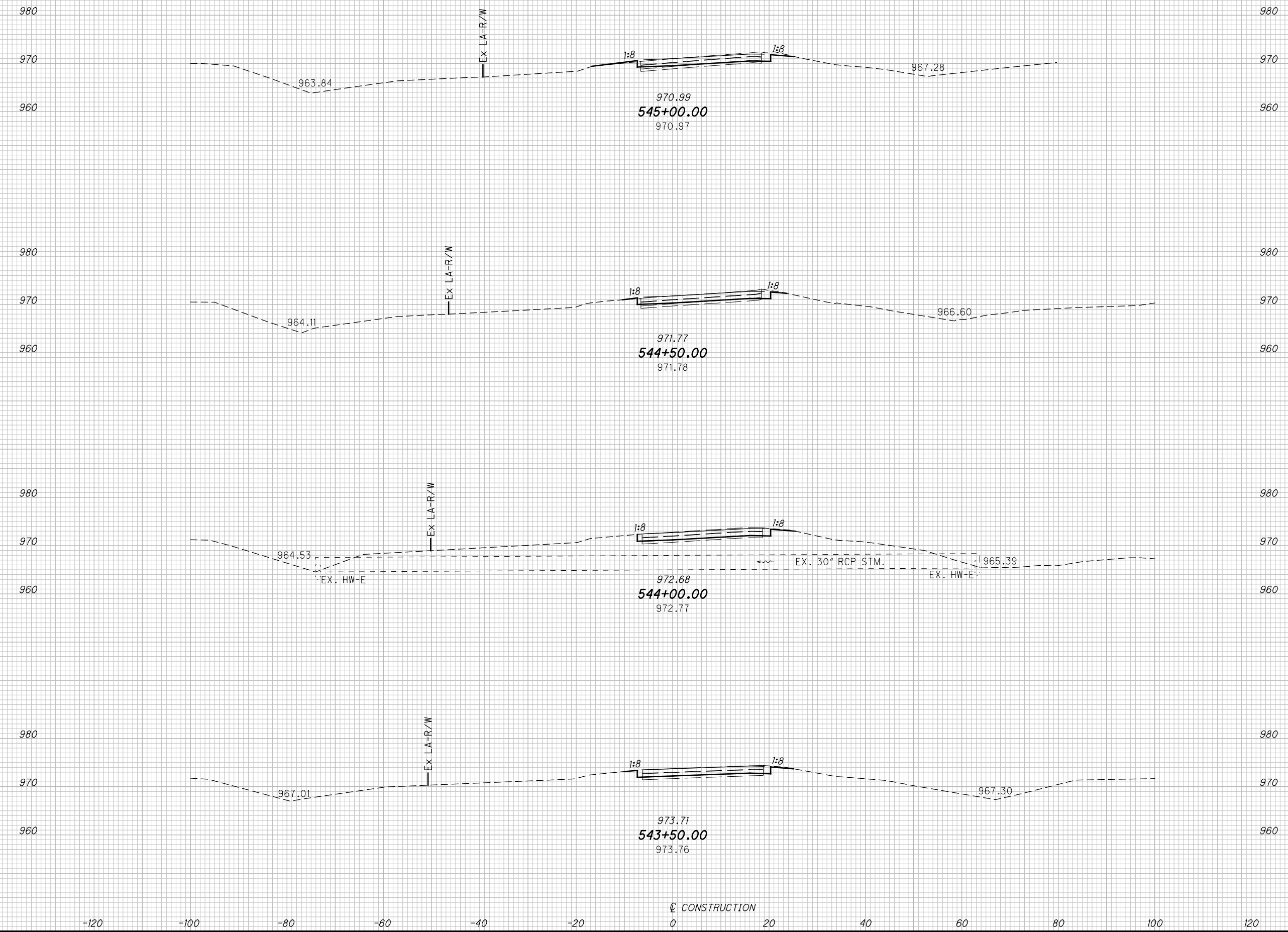
MAD-29-10.61

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| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |

SEE SHEET 15

| END AREA | VOLUME | CALCULATED | CHECKED | DWO |
|----------|--------|------------|---------|-----|
| | | | | |
| | | | | |



SEE SHEET 15

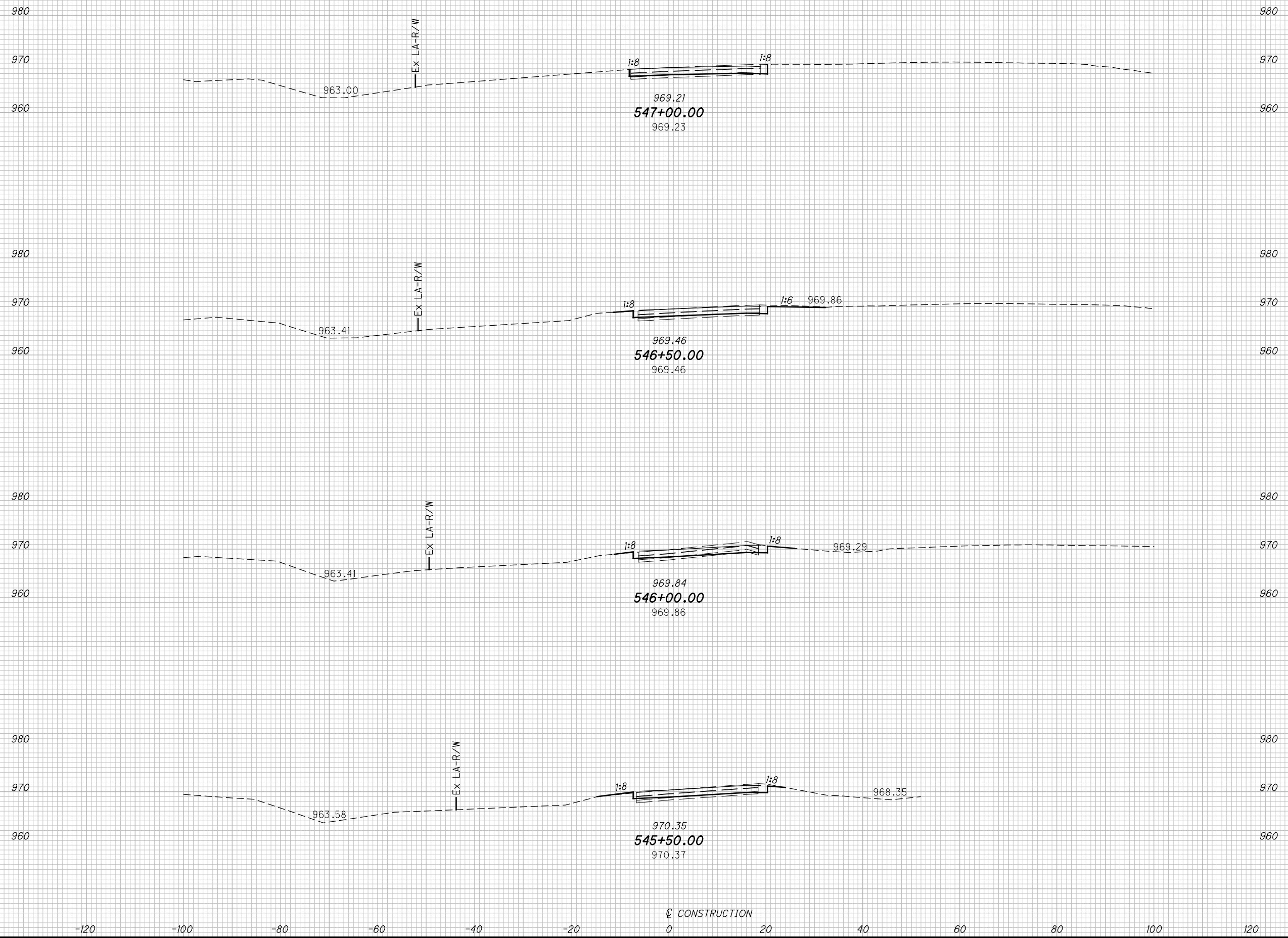
CROSS SECTIONS - RAMP B
STA. 543+50.00 TO STA. 545+00.00

MAD-29-10.61

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| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |

SEE SHEET 15



| END AREA | | VOLUME | | CALCULATED GF | CHECKED DWO |
|----------|------|--------|------|---------------|-------------|
| CUT | FILL | CUT | FILL | | |
| | | | | | |

SEE SHEET 15

CROSS SECTIONS - RAMP B
STA. 545+50.00 TO STA. 547+00.00

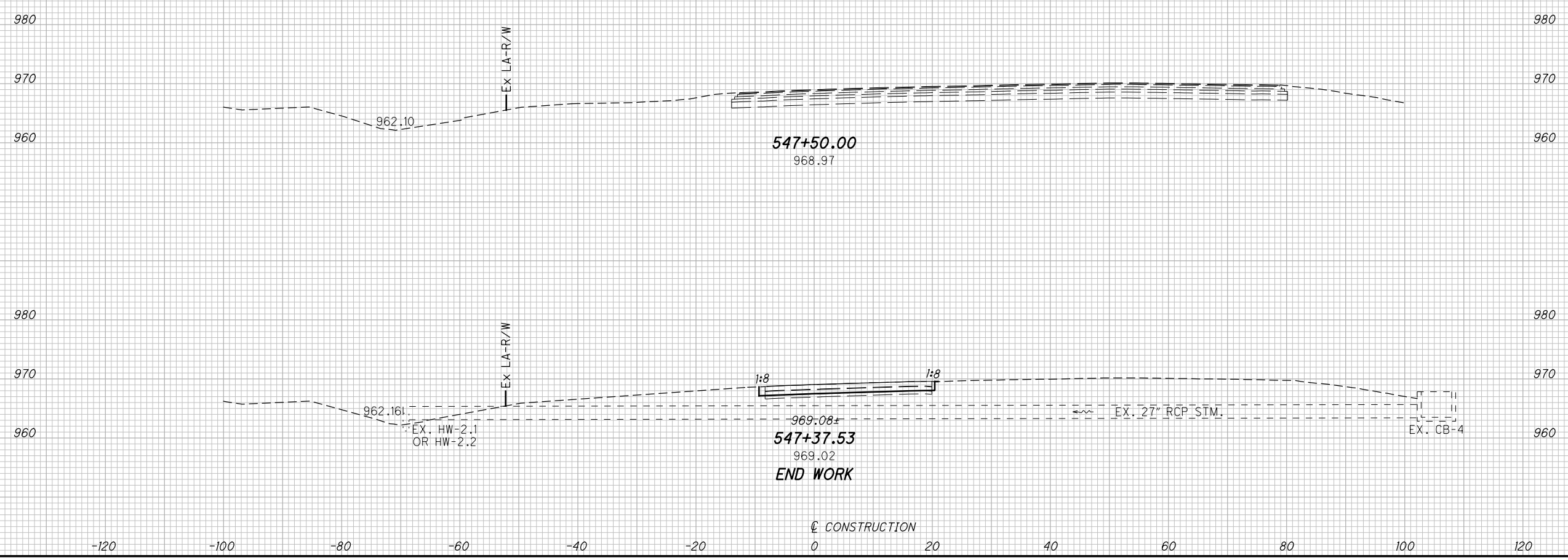
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|----|
| 28 |
| 76 |

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| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |

SEE SHEET 15



| END AREA | | VOLUME | | CALCULATED GF | CHECKED DWO |
|----------|------|--------|------|---------------|-------------|
| CUT | FILL | CUT | FILL | | |
| | | | | | |

SEE SHEET 15

MAD-29-10.61

CROSS SECTIONS - RAMP B

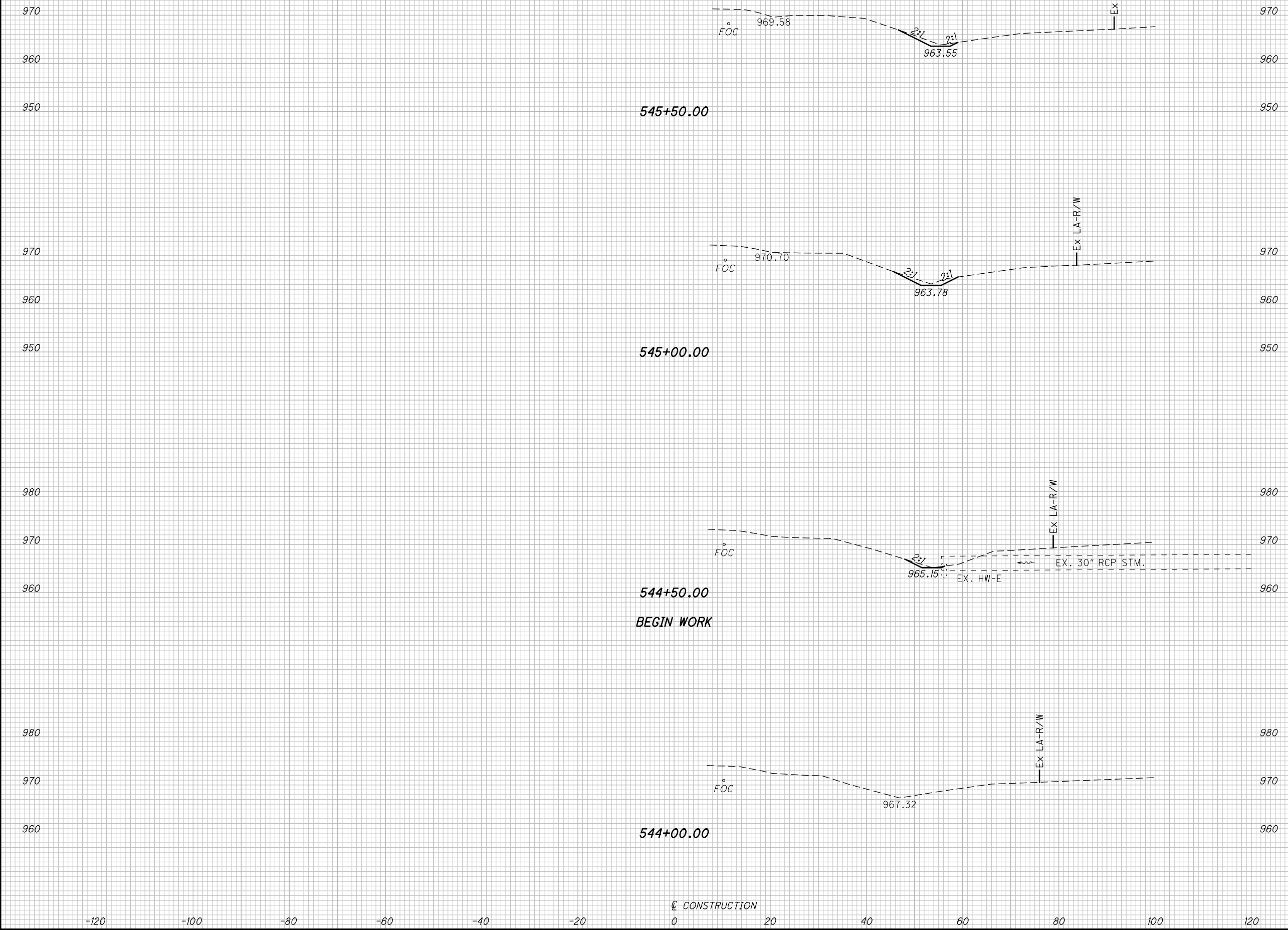
STA. 547+37.53 TO STA. 547+50.00

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SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |

| END AREA | | VOLUME | | CALCULATED | |
|----------|------|--------|------|------------|---------|
| CUT | FILL | CUT | FILL | GF | CHECKED |
| | | | | | |



FOR INFORMATION ONLY, SEE SHEET 16

CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 544+00.00 TO STA. 545+50.00

MAD-29-10.61

31
76

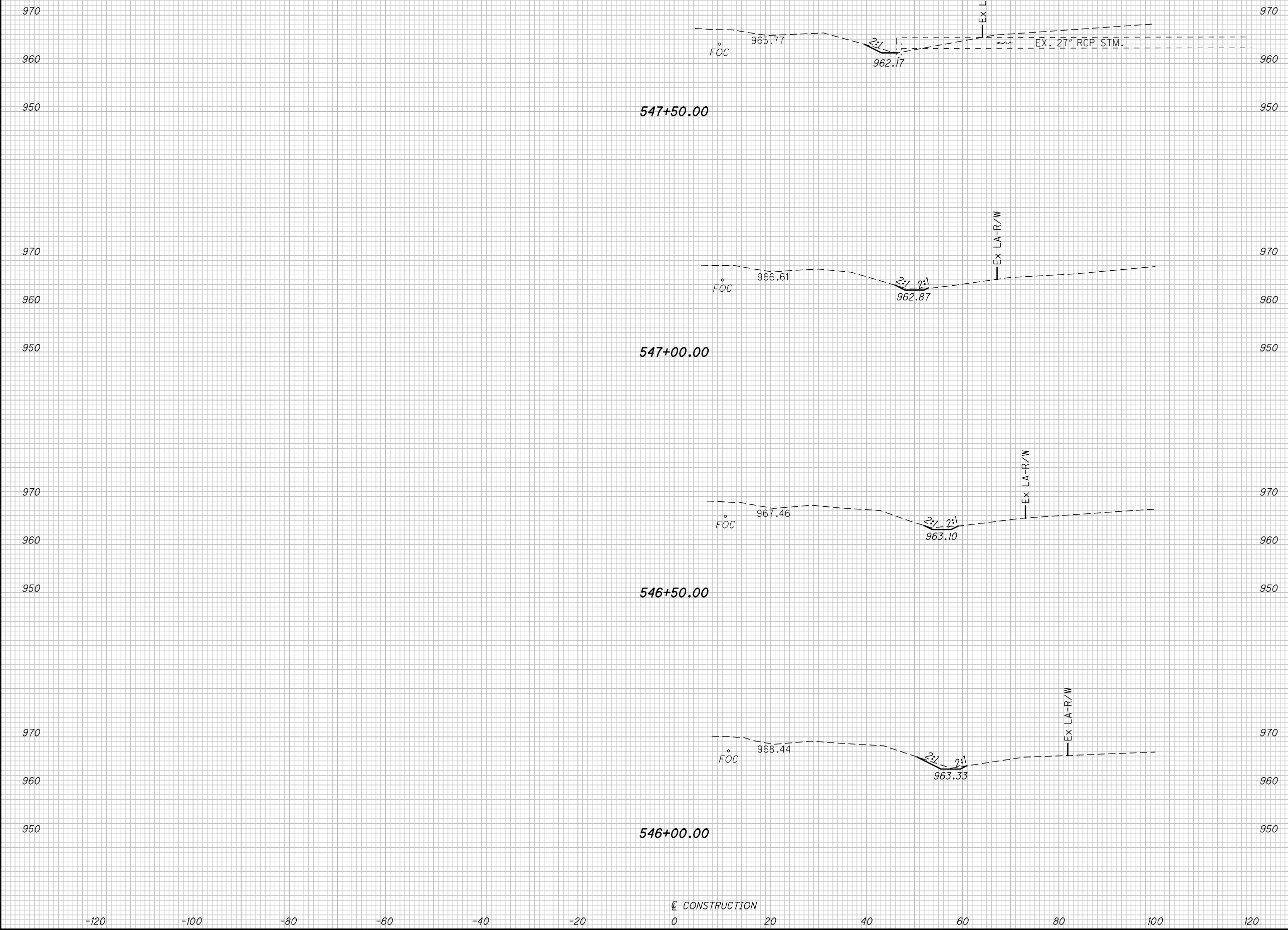
CONSTRUCTION
0 20 40 60 80 100 120

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SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |

| END AREA | | VOLUME | | CALCULATED | |
|----------|------|--------|------|------------|---------|
| CUT | FILL | CUT | FILL | GF | CHECKED |
| | | | | | |



FOR INFORMATION ONLY, SEE SHEET 16

CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 546+00.00 TO STA. 547+50.00

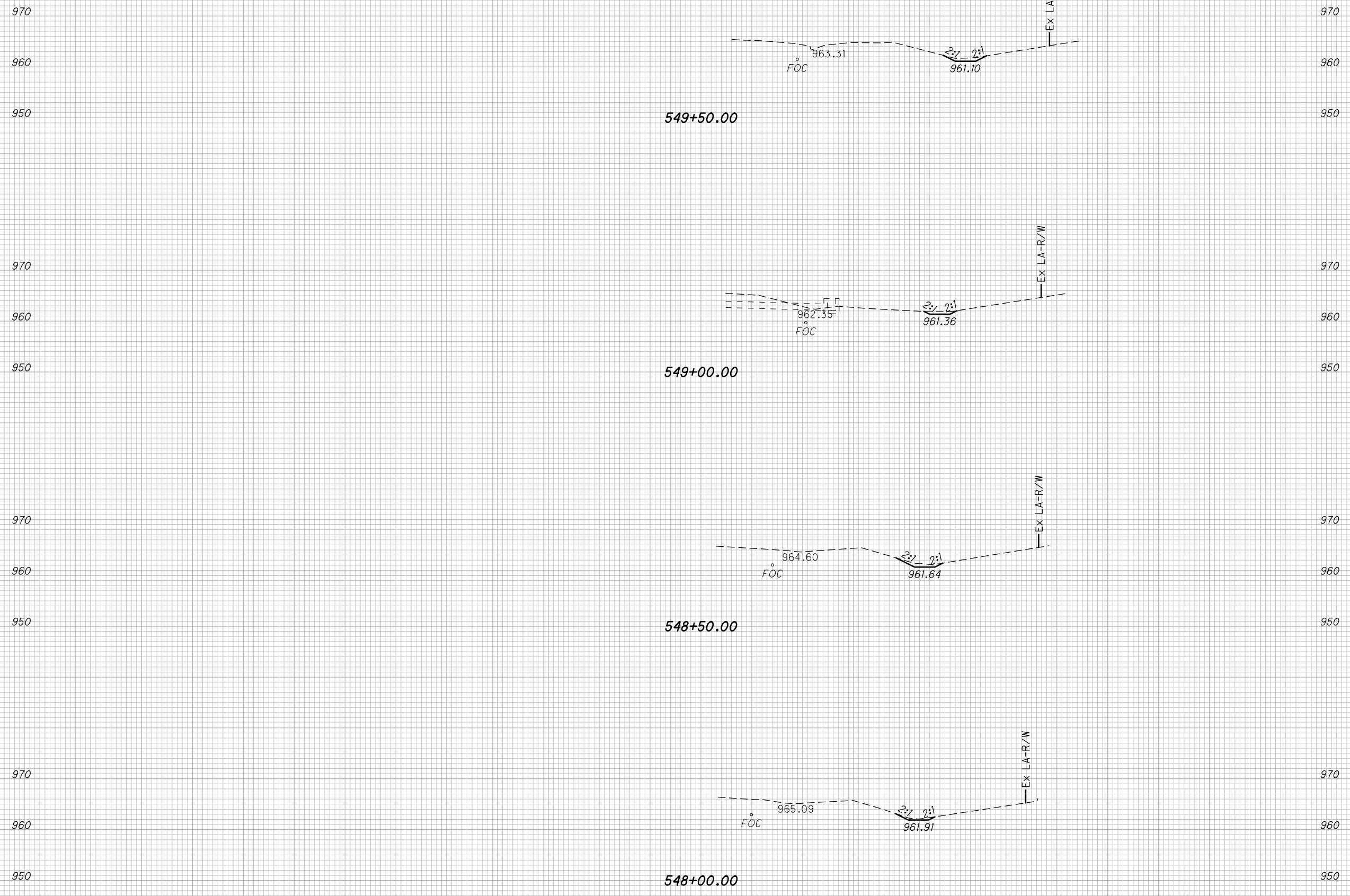
MAD-29-10.61

32
76

CONSTRUCTION
0 20 40 60 80 100 120

SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |



FOR INFORMATION ONLY, SEE SHEET 16

| END AREA | | VOLUME | | CALCULATED GF | CHECKED DWO |
|----------|------|--------|------|---------------|-------------|
| CUT | FILL | CUT | FILL | | |
| | | | | | |

CROSS SECTIONS - CHANNEL (SNYDER LANE)
 STA. 548+00.00 TO STA. 549+50.00

MAD-29-10.61

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SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |

| END AREA | | VOLUME | | CALCULATED GF | CHECKED DWO |
|----------|------|--------|------|---------------|-------------|
| CUT | FILL | CUT | FILL | | |

970

960

950

970

960

950

970

960

950

970

960

950

970

960

950

970

960

950

970

960

950

970

960

950

551+50.00

551+00.00

550+50.00

550+00.00

965.71

960.06

965.05

960.32

964.51

960.58

964.11

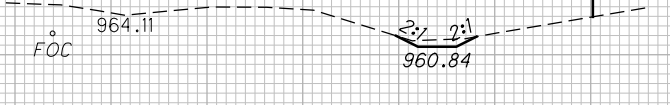
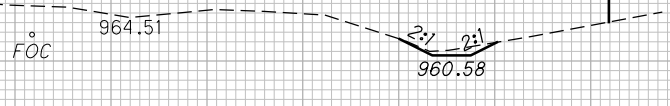
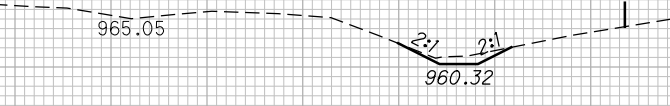
960.84

EX LA-R/W

EX LA-R/W

EX LA-R/W

EX LA-R/W



FOR INFORMATION ONLY, SEE SHEET 16

CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 550+00.00 TO STA. 551+50.00

MAD-29-10.61

34
76

-120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120

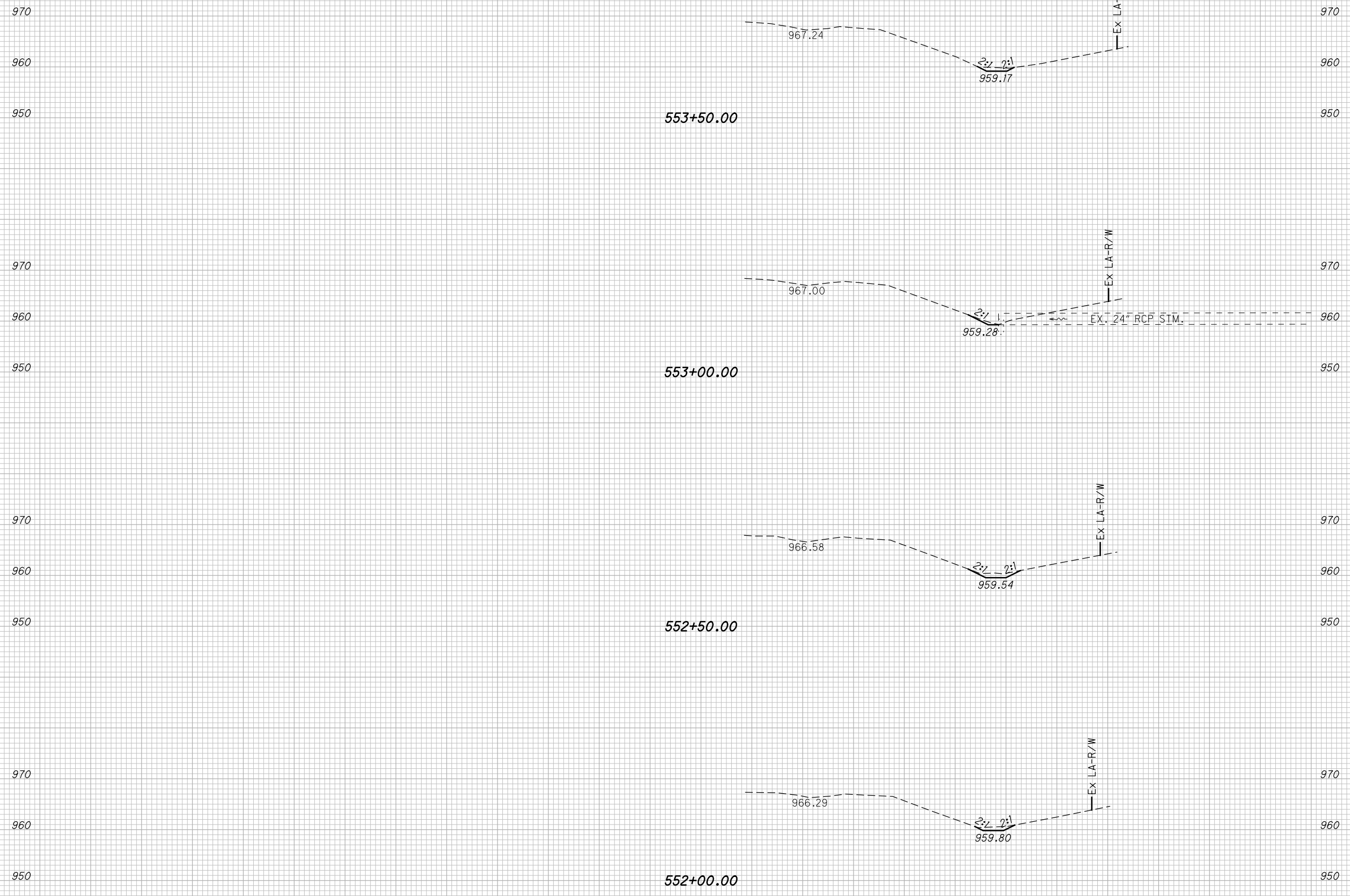
CONSTRUCTION

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SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |

| END AREA | | VOLUME | | CALCULATED | |
|----------|------|--------|------|------------|-----|
| CUT | FILL | CUT | FILL | GF | DWO |
| | | | | | |



FOR INFORMATION ONLY, SEE SHEET 16

CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 552+00.00 TO STA. 553+50.00

MAD-29-10.61

35
76

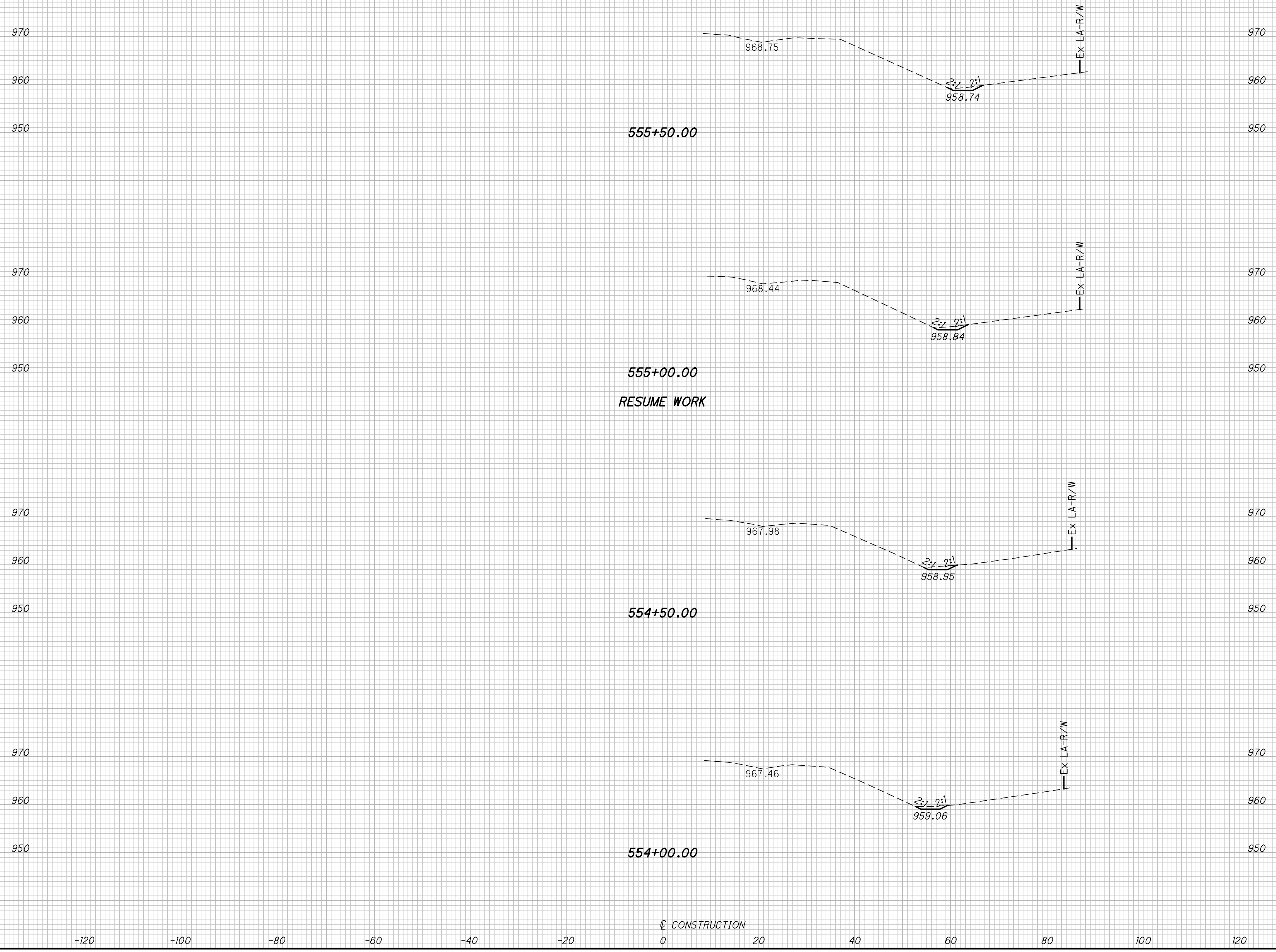
-120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120

CONSTRUCTION

SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |

| END AREA | | VOLUME | | CALCULATED | |
|----------|------|--------|------|------------|-----|
| CUT | FILL | CUT | FILL | GF | DWO |
| | | | | | |



RESUME WORK

FOR INFORMATION ONLY, SEE SHEET 16

CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 554+00.00 TO STA. 555+50.00

MAD-29-10.61

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SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |

| END AREA | | VOLUME | | CALCULATED GF | CHECKED DWO |
|----------|------|--------|------|---------------|-------------|
| CUT | FILL | CUT | FILL | | |

970
960
950
970
960
950
970
960
950
970
960
950

970
960
950
970
960
950
970
960
950

557+50.00

557+00.00

556+50.00

556+00.00

969.03

968.94

969.04

969.02

958.30

958.41

958.52

958.63

Ex LA-R/W

Ex LA-R/W

Ex LA-R/W

Ex LA-R/W

FOR INFORMATION ONLY, SEE SHEET 16

CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 556+00.00 TO STA. 557+50.00

MAD-29-10.61

37
76

CONSTRUCTION

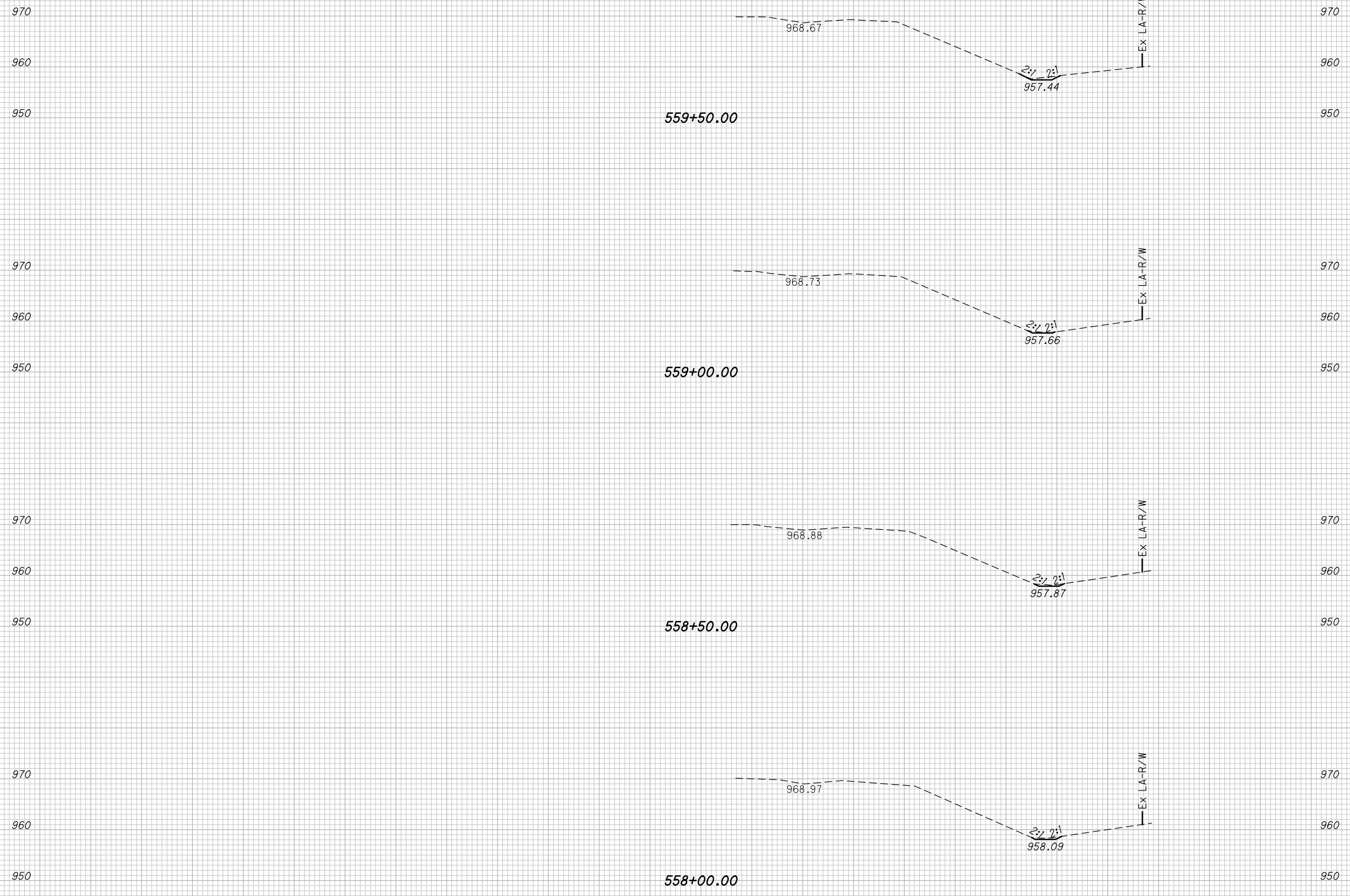
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SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |

| END AREA | | VOLUME | | CALCULATED | |
|----------|------|--------|------|------------|-----|
| CUT | FILL | CUT | FILL | GF | DWO |



FOR INFORMATION ONLY, SEE SHEET 16

CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 558+00.00 TO STA. 559+50.00

MAD-29-10.61

38
76

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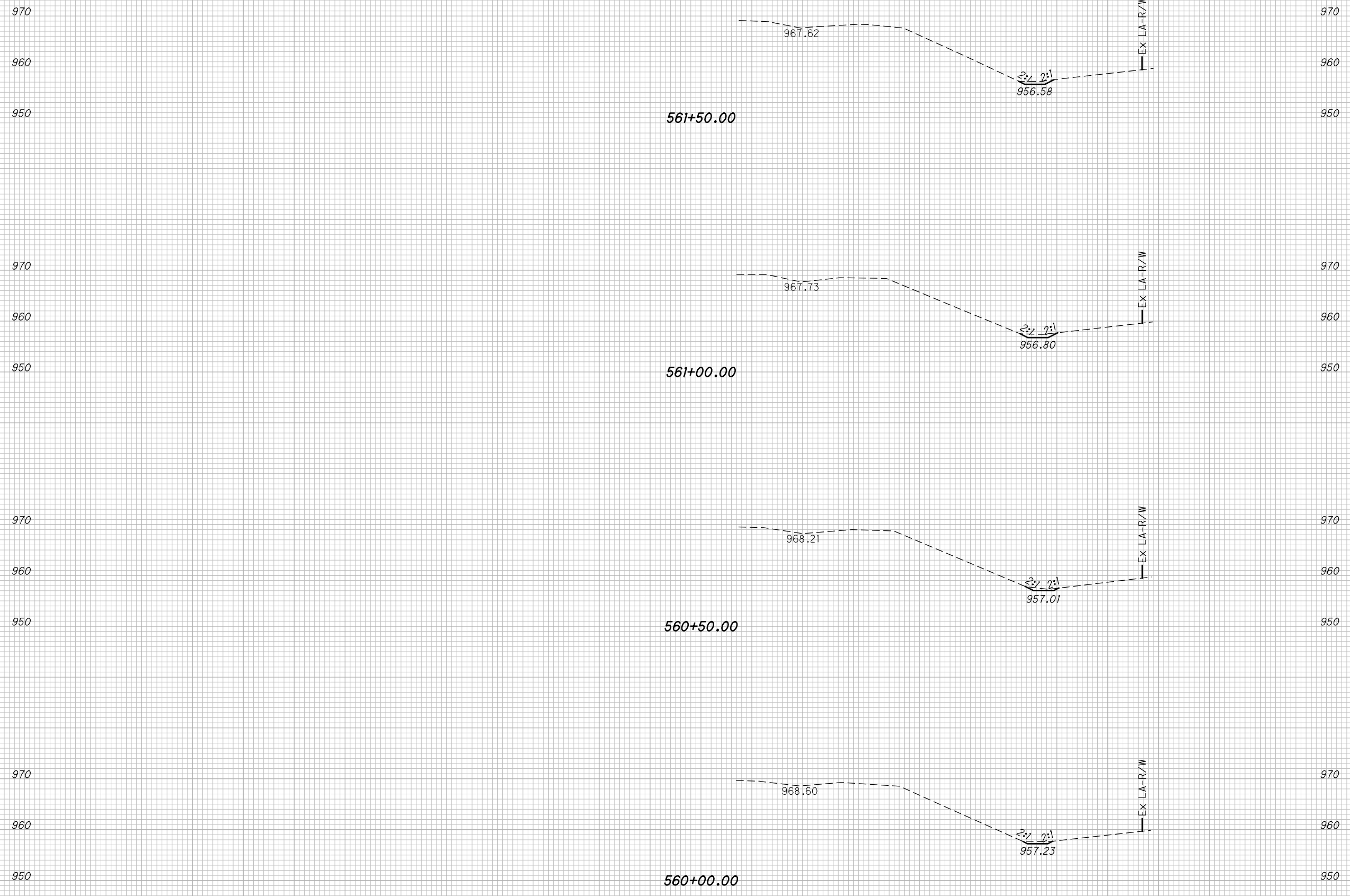
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SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |

| END AREA | | VOLUME | | CALCULATED GF | CHECKED DWO |
|----------|------|--------|------|---------------|-------------|
| CUT | FILL | CUT | FILL | | |



FOR INFORMATION ONLY, SEE SHEET 16

CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 560+00.00 TO STA. 561+50.00

MAD-29-10.61

39
76

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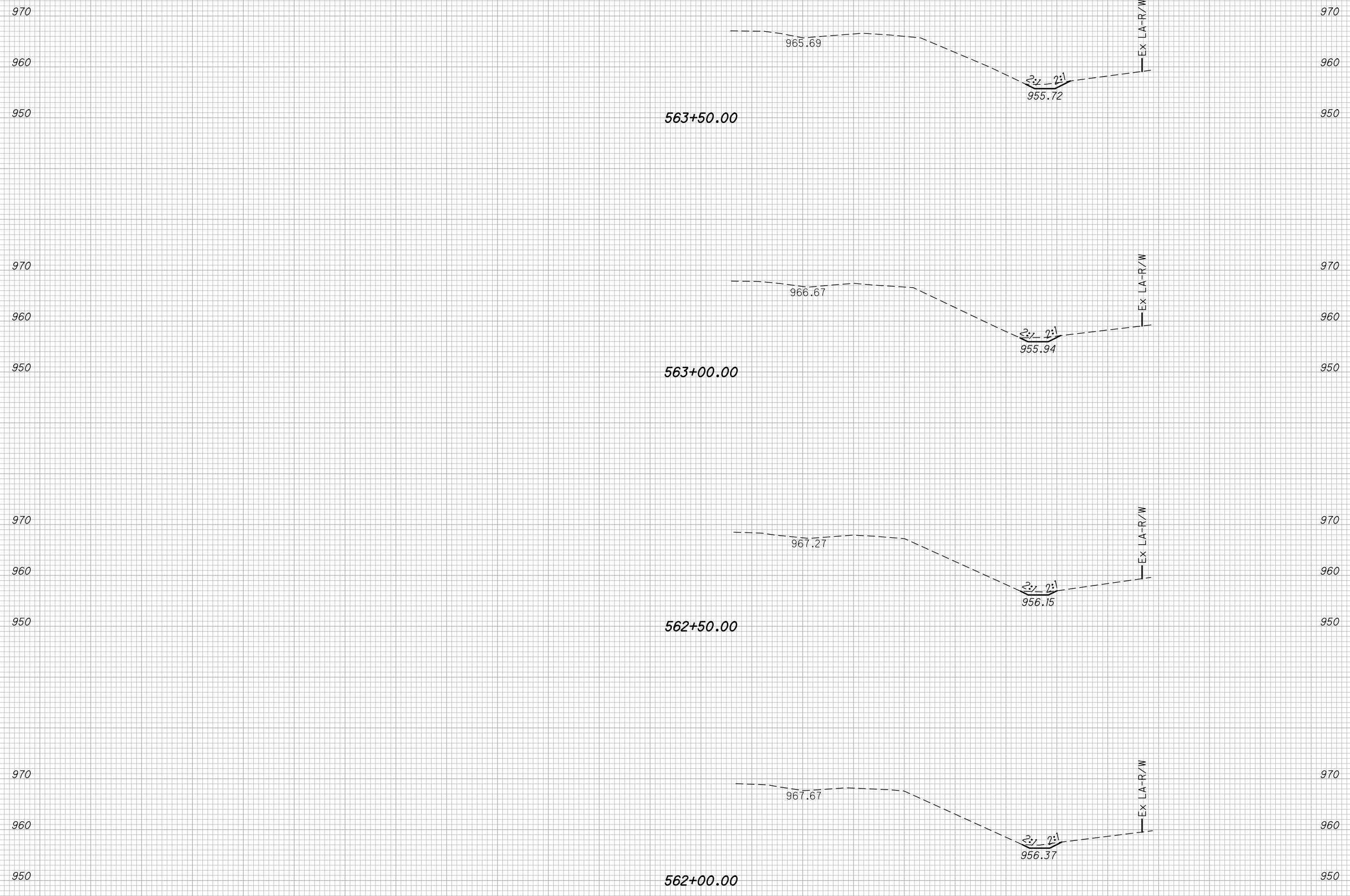
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SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |

| END AREA | | VOLUME | | CALCULATED | |
|----------|------|--------|------|------------|-----|
| CUT | FILL | CUT | FILL | GF | DWO |
| | | | | | |



FOR INFORMATION ONLY, SEE SHEET 16

CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 562+00.00 TO STA. 563+50.00

MAD-29-10.61

| |
|----|
| 40 |
| 76 |

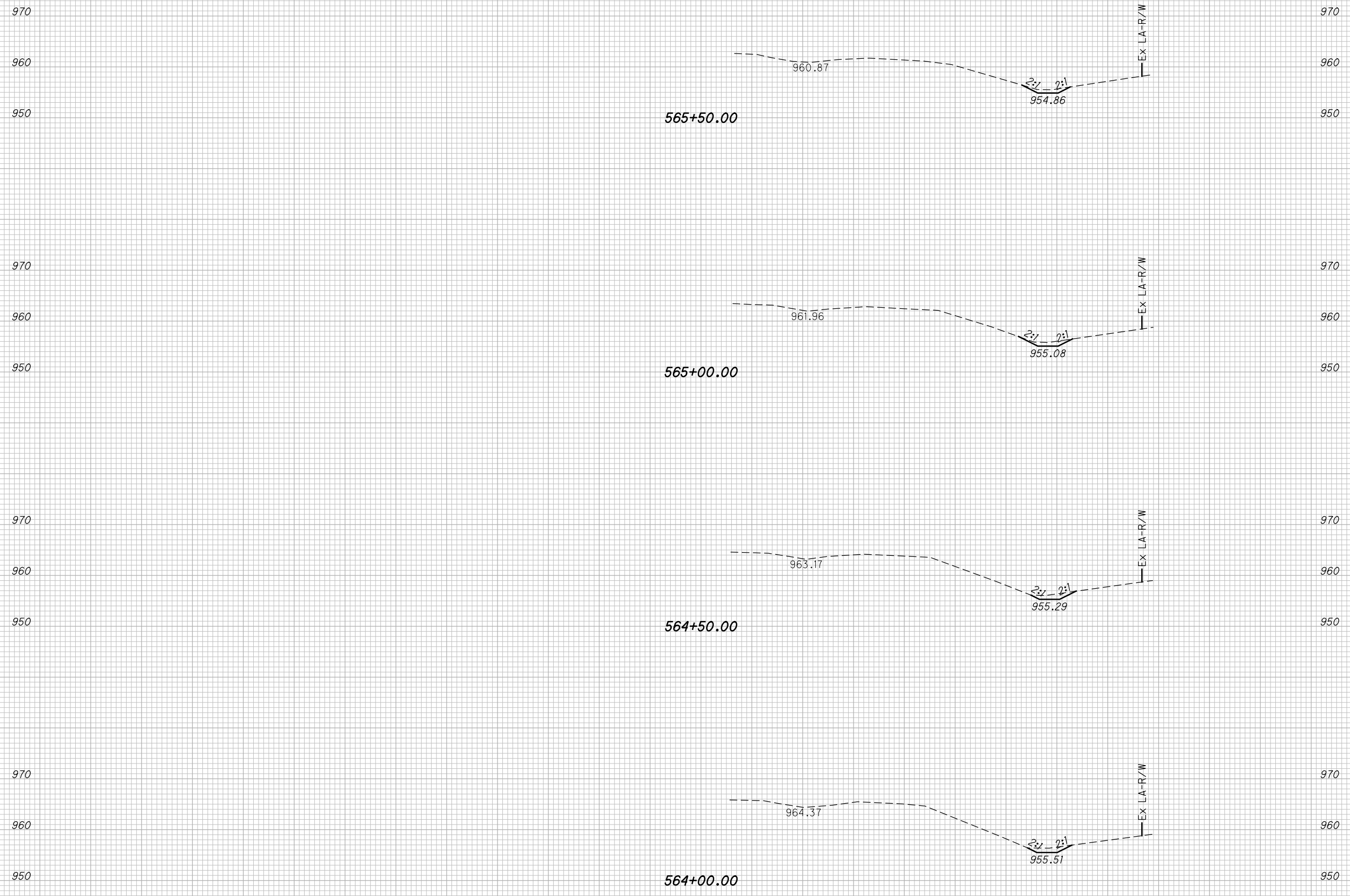
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SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |



-120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120

CONSTRUCTION

FOR INFORMATION ONLY, SEE SHEET 16

| END CUT | AREA FILL | VOLUME | | CALCULATED GF | CHECKED DWO |
|---------|-----------|--------|------|---------------|-------------|
| | | CUT | FILL | | |
| | | | | | |

CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 564+00.00 TO STA. 565+50.00

MAD-29-10.61

41
76

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SEE SHEET 16

SEEDING
END SO.
WIDTH YDS.

970

960

950

970

960

950

970

960

950

970

960

950

-120

-100

-80

-60

-40

-20

0 CONSTRUCTION

0

20

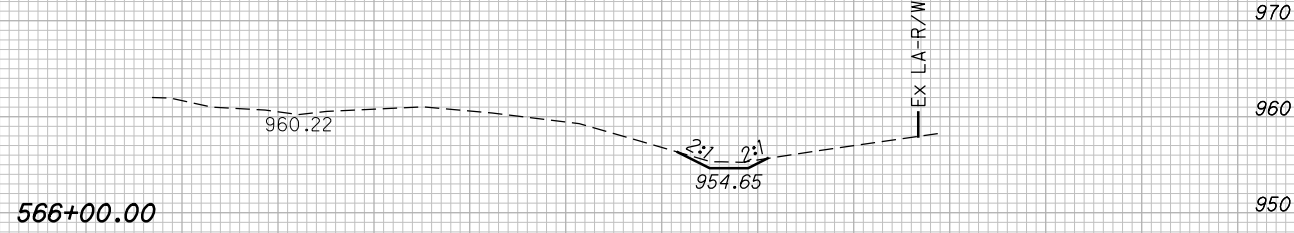
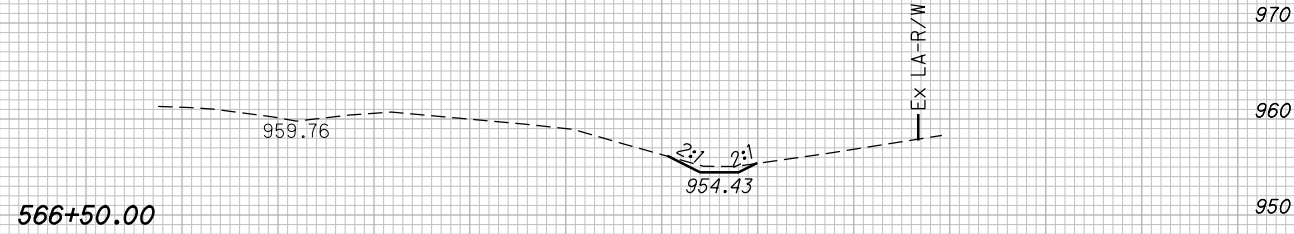
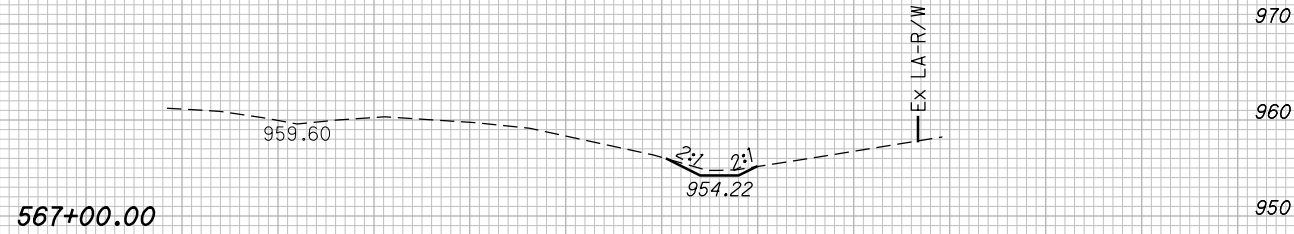
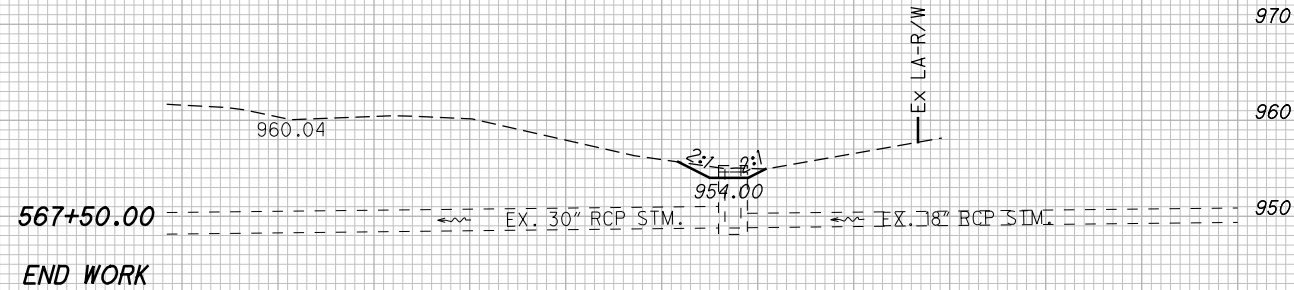
40

60

80

100

120



FOR INFORMATION ONLY, SEE SHEET 16

| END AREA | | VOLUME | | CALCULATED GF | CHECKED DWO |
|----------|------|--------|------|------------------|----------------|
| CUT | FILL | CUT | FILL | | |
| | | | | | |

CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 566+00.00 TO STA. 567+50.00

MAD-29-10.61

42
76

SEE SHEET 16

| SEEDING | |
|-----------|----------|
| END WIDTH | SO. YDS. |
| | |

970
960
950

-120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120

568+00.00

CONSTRUCTION

960.86

955.64

Ex LA-R/W

970
960
950

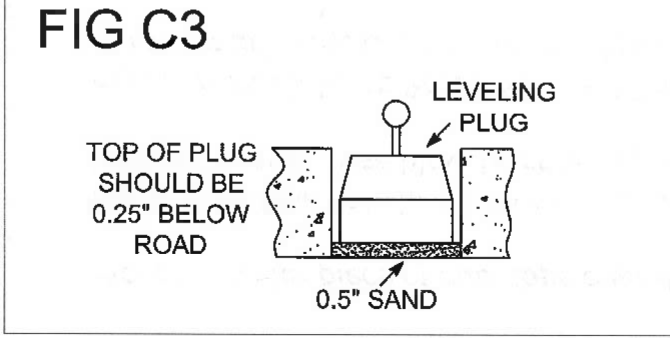
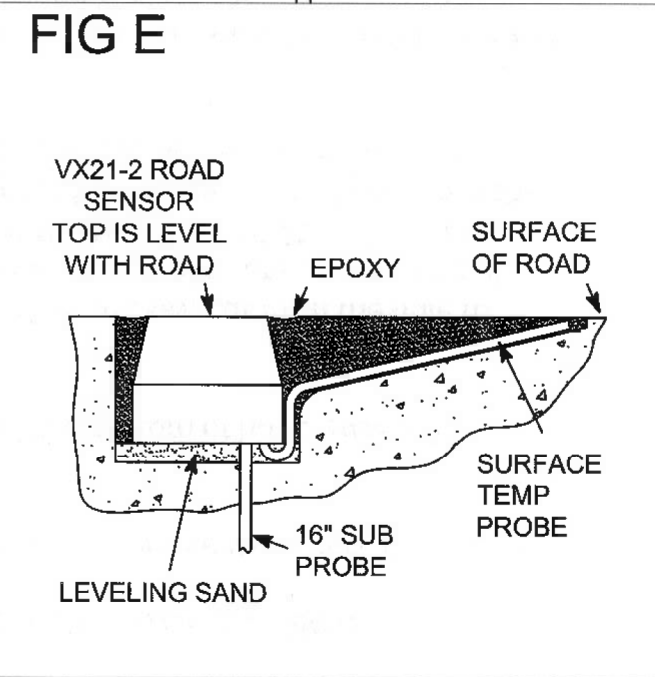
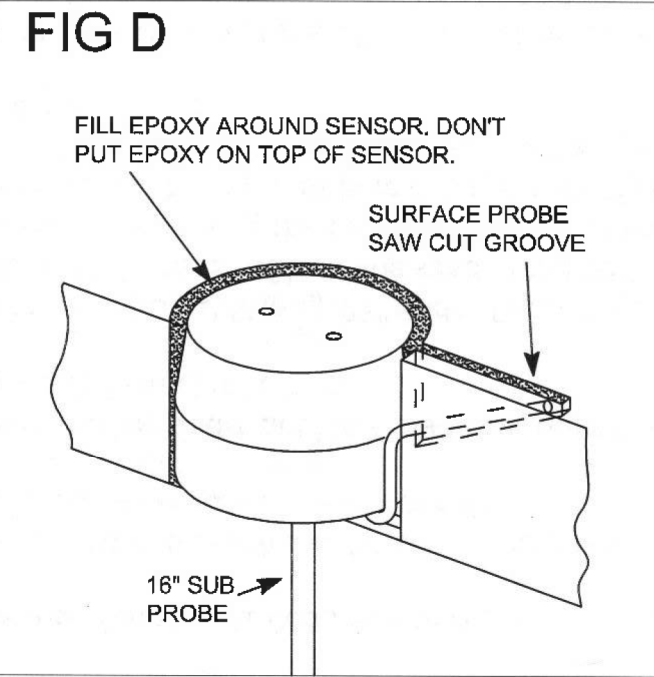
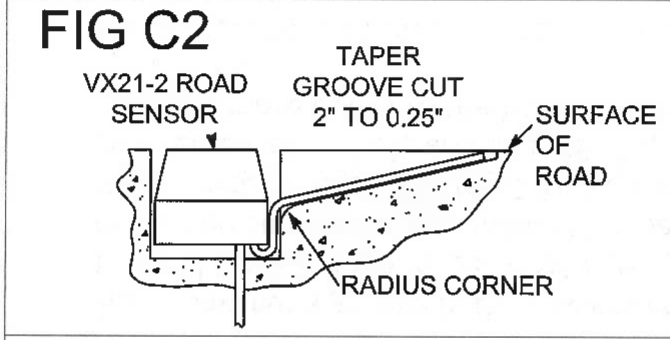
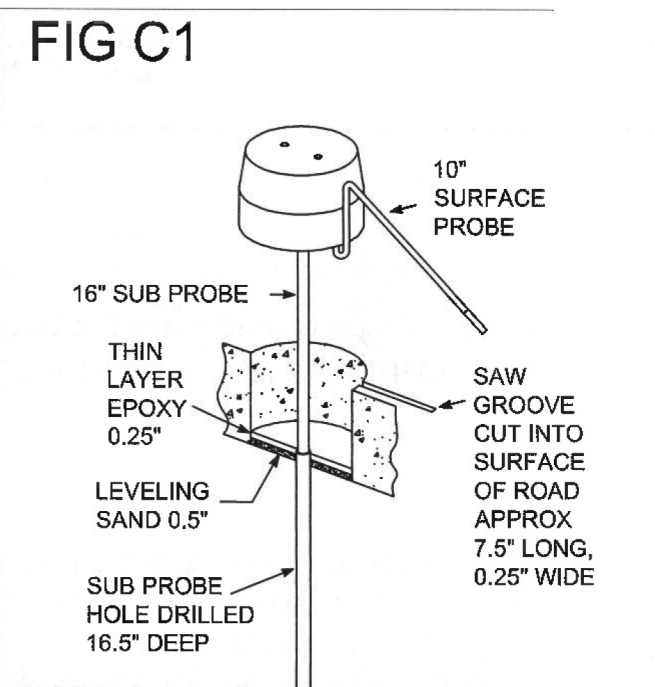
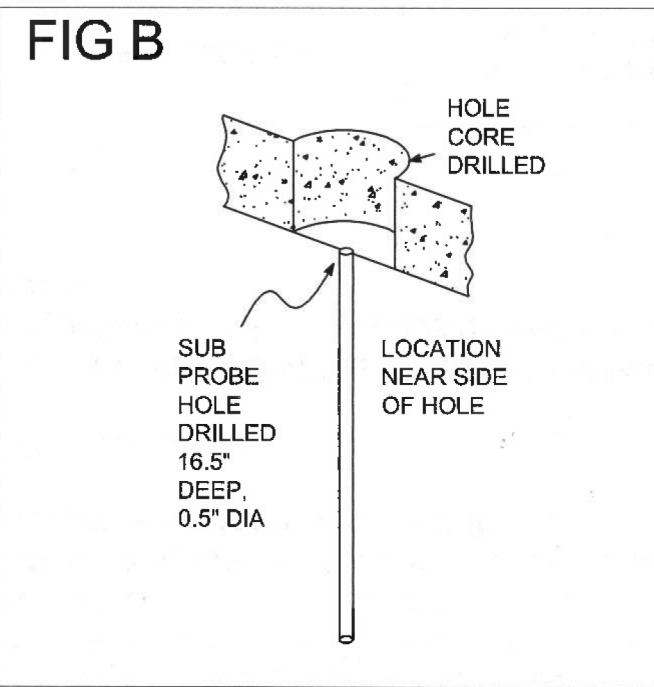
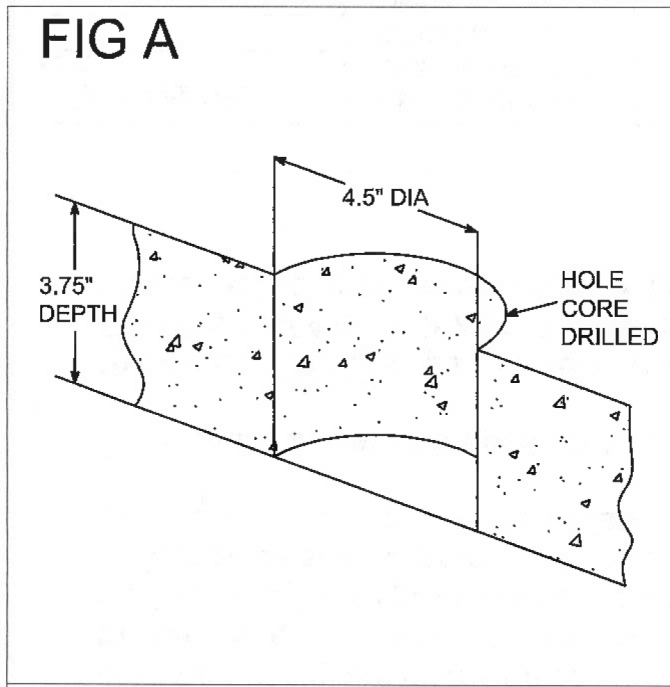
FOR INFORMATION ONLY, SEE SHEET 16

| END AREA | | VOLUME | | CALCULATED GF | CHECKED DWO |
|----------|------|--------|------|---------------|-------------|
| CUT | FILL | CUT | FILL | | |
| | | | | | |

MAD-29-10.61

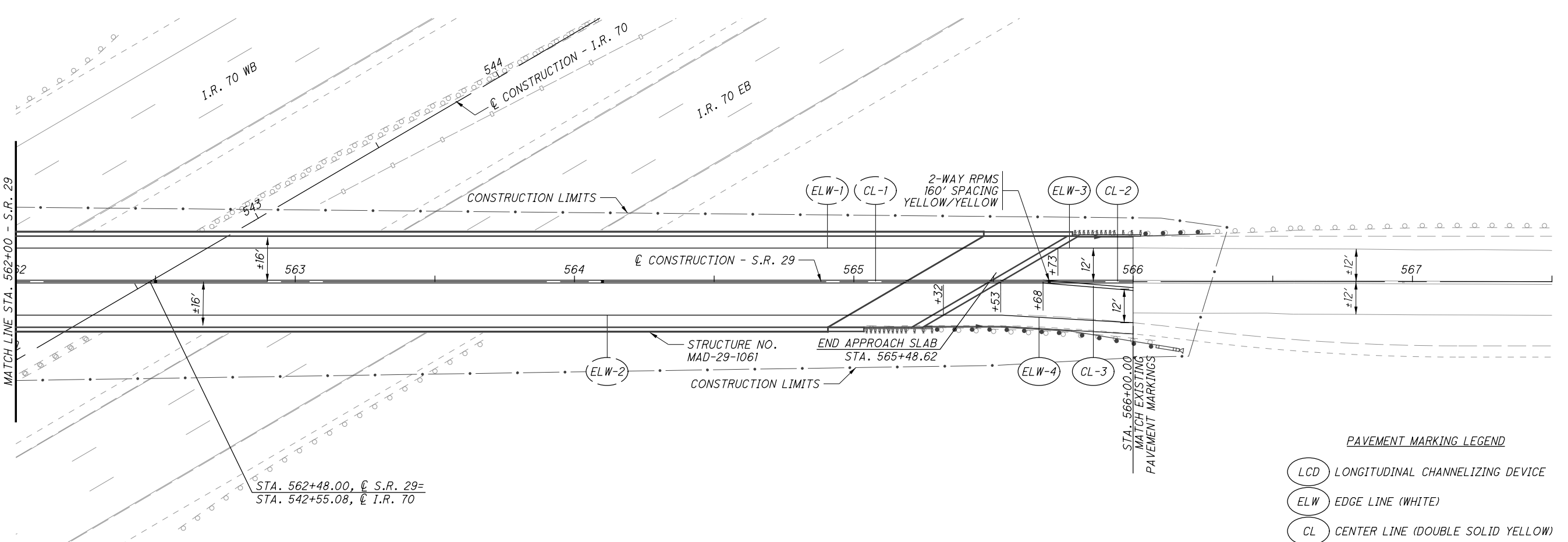
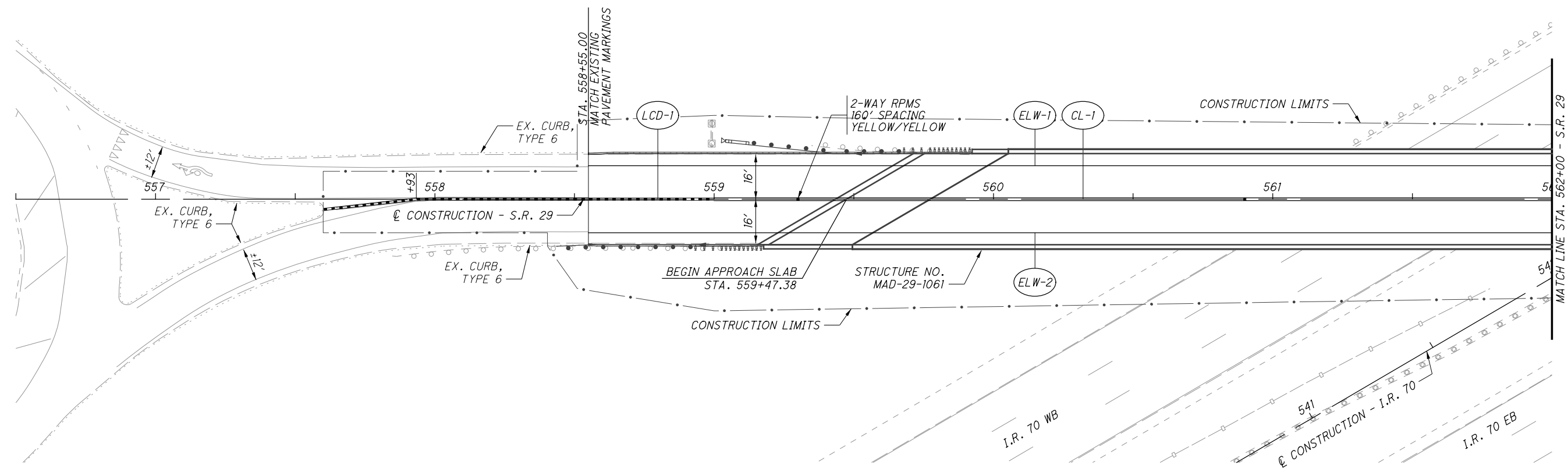
CROSS SECTIONS - CHANNEL (SNYDER LANE)
STA. 568+00.00

43
76



REMOTE WEATHER INFORMATION SYSTEM SENSOR, VX21-2
 INSTALLATION DETAILS
 DETAILS PROVIDED BY ODOT, DISTRICT 6
 SEE GENERAL NOTES, SHEET 6

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- PAVEMENT MARKING LEGEND**
- (LCD) LONGITUDINAL CHANNELIZING DEVICE
 - (ELW) EDGE LINE (WHITE)
 - (CL) CENTER LINE (DOUBLE SOLID YELLOW)

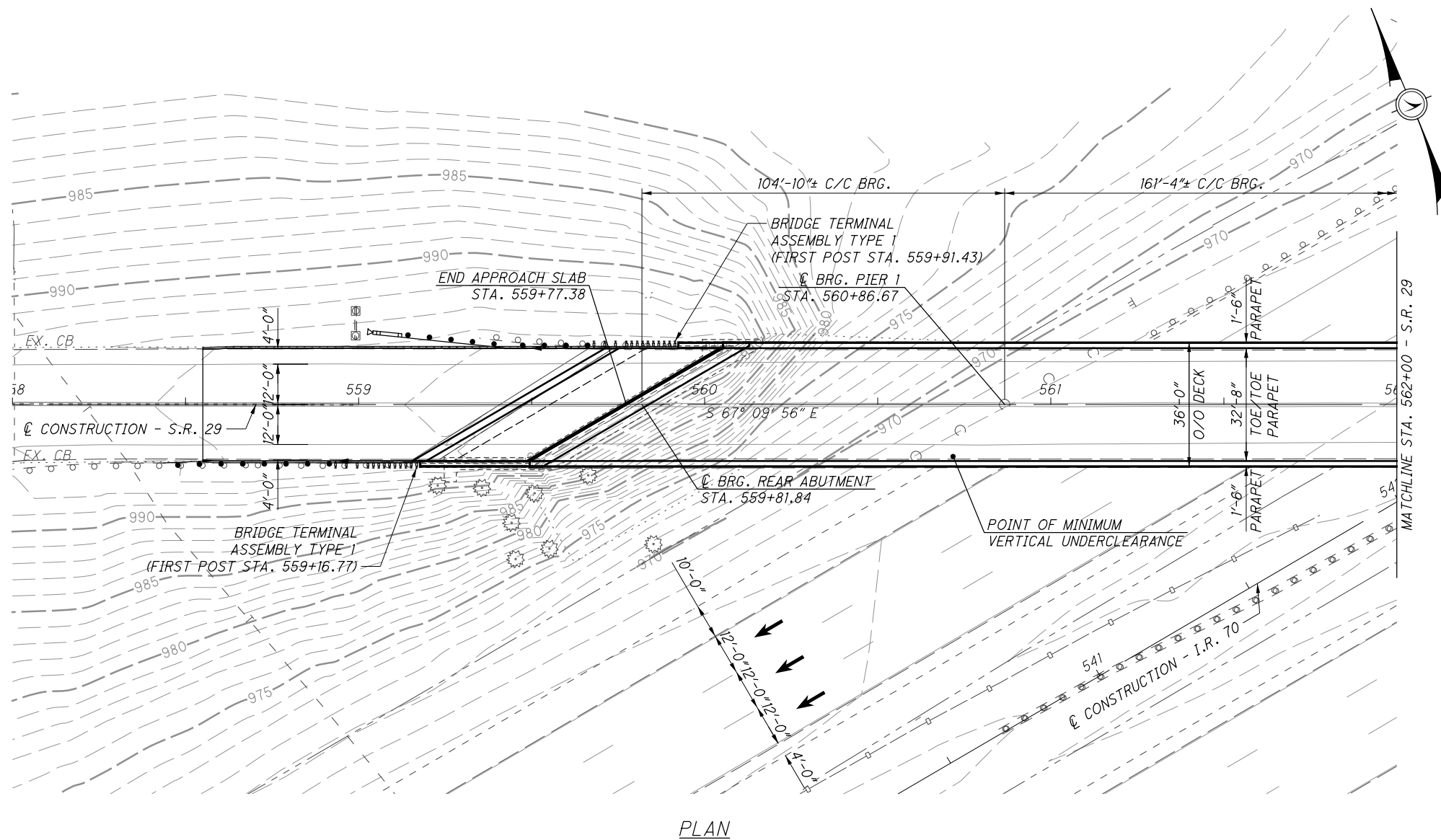
CALCULATED GF
 CHECKED DWO

0 20 40
 HORIZONTAL SCALE IN FEET

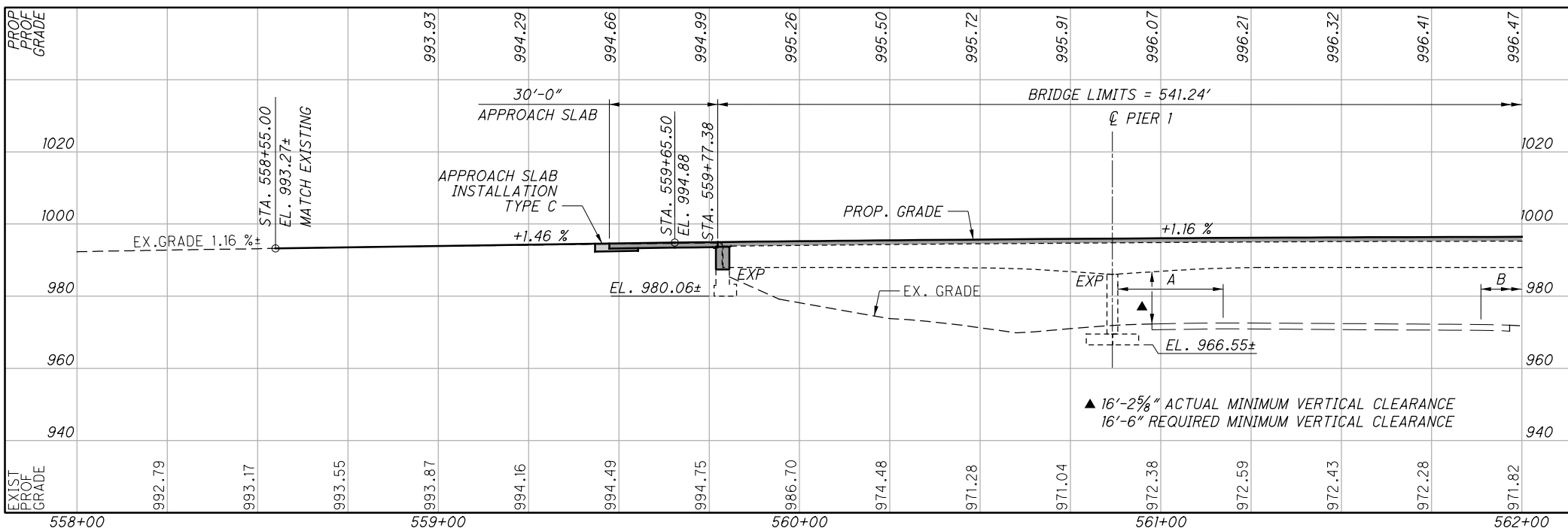
PAVEMENT MARKING PLAN - S.R. 29
STA. 558+55.00 TO STA. 566+00.00

MAD-29-10.61

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PLAN



PROFILE ALONG \hat{C} CONSTRUCTION - S.R. 29

BENCHMARK DATA

BM4 STA. 569+00 (+/-), ELEV. 957.763
 TOP OF IRON PIN IN CENTERLINE CONCRETE MONUMENT AT STATION 569+00 (+/-) 1000 FEET WEST OF OVERHEAD CANTILEVER SIGN SUPPORT OVER THE NORTH SIDE OF WEST BOUND I-70 EXIT 80.

DESIGN TRAFFIC:

2017 ADT = 3,400 2017 ADTT = 440
 2029 ADT = 4,200 2029 ADTT = 550
 DIRECTIONAL DISTRIBUTION = 59%

HORIZONTAL CLEARANCES

| DIMENSION | ACTUAL |
|-----------|--------|
| A | 10'-4" |
| B | 22'-1" |
| C | 22'-8" |
| D | 11'-7" |

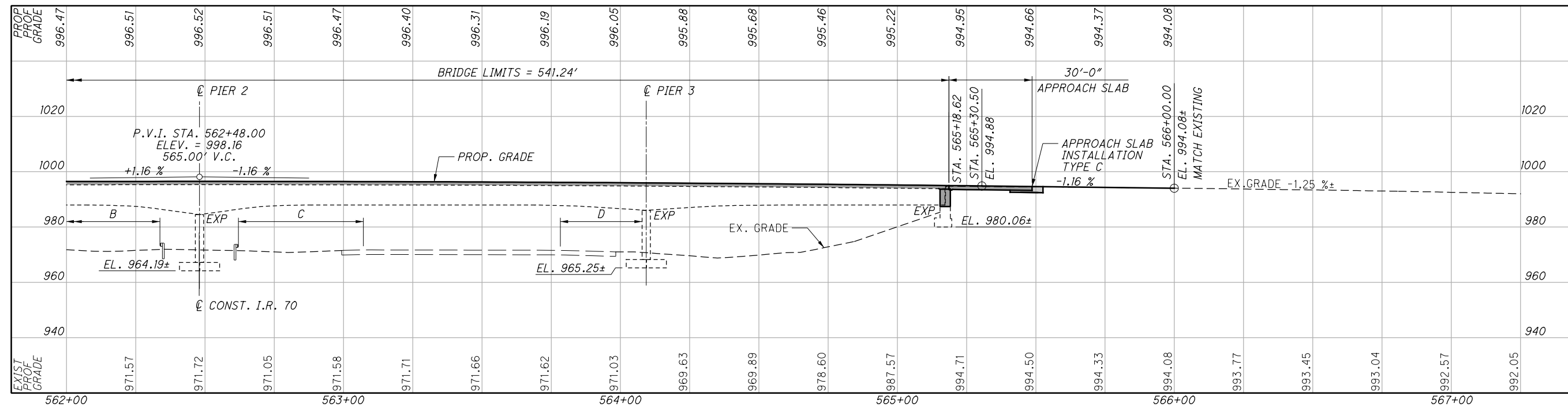
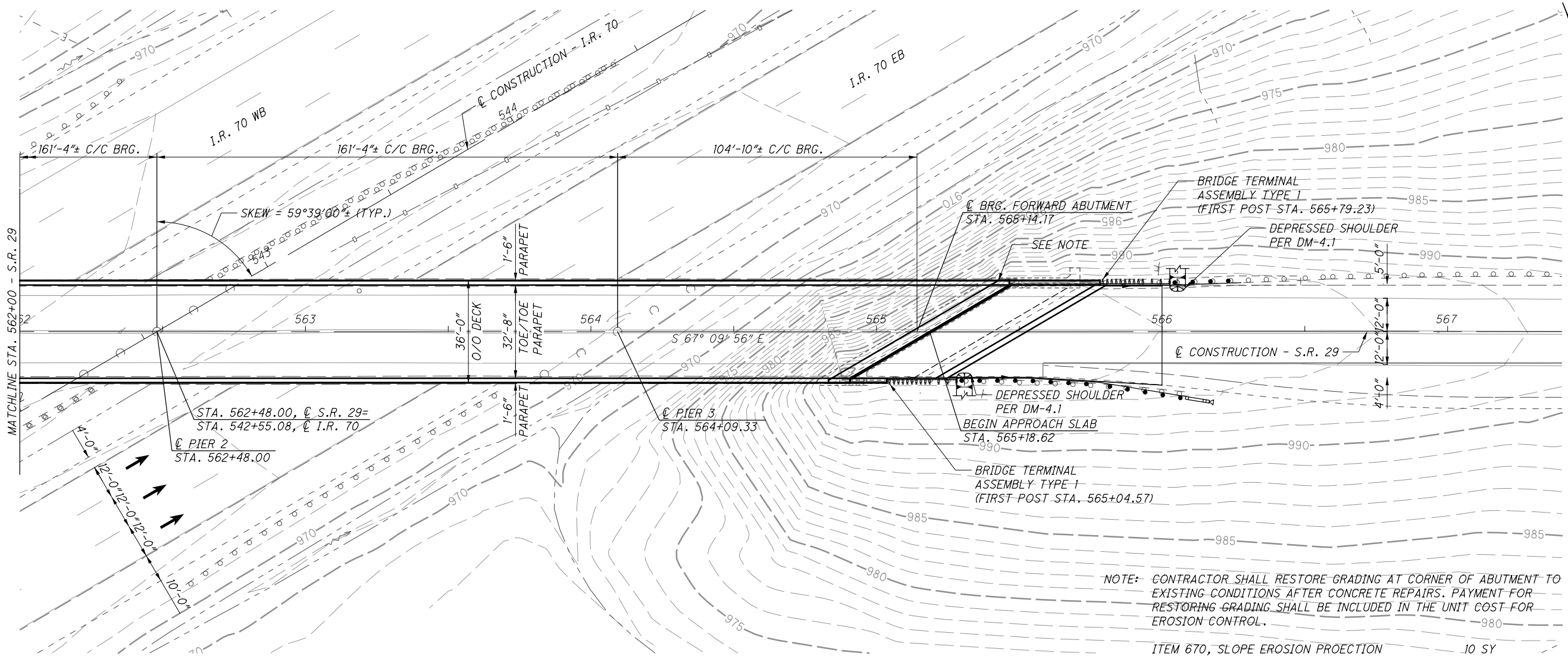
EXISTING STRUCTURE

TYPE: 4 SPAN CONTINUOUS HAUNCHED STEEL GIRDERS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
 SPANS: 104'-10"±, 161'-4"±, 161'-4"±, 104'-10"± C/C BEARINGS
 ROADWAY: 31'-8"± TOE/TOE PARAPETS
 LOADING: CF = 400 (57)
 SKEW: 59°39'00"± LEFT FORWARD
 WEARING SURFACE: MONOLITHIC CONCRETE AND 1/2" CONCRETE OVERLAY
 APPROACH SLABS: (AS-1-81) 25'-0" LONG
 ALIGNMENT: TANGENT
 STRUCTURE FILE NUMBER: 4900243
 DATE BUILT: 1969 (OVERLAY 1985)

PROPOSED STRUCTURE

PROPOSED WORK: NEW COMPOSITE REINFORCED CONCRETE DECK WITH NEW SINGLE SLOPE CONCRETE PARAPETS (SBR-1-13). CONVERT EXISTING ABUTMENTS TO SEMI-INTEGRAL ABUTMENTS. REPLACE APPROACH SLABS, PATCH PIERS AND ABUTMENTS. EPOXY SEAL PARAPETS, ABUTMENTS, AND PIERS.
 TYPE: 4 SPAN CONTINUOUS HAUNCHED STEEL GIRDERS WITH REINFORCED CONCRETE DECK ON REHABILITATED ABUTMENTS AND PIERS.
 SPANS: 104'-10"±, 161'-4"±, 161'-4"±, 104'-10"± C/C BEARINGS
 ROADWAY: 32'-8" TOE/TOE PARAPETS
 LOADING: HS-20 (CASE II), ALTERNATE MILITARY LOADING AND FUTURE 60 PSF WEARING SERVICE
 SKEW: 59°39'00"± LEFT FORWARD
 WEARING SURFACE: 1" MONOLITHIC CONCRETE
 APPROACH SLABS: (AS-1-15) 30'-0" LONG
 ALIGNMENT: TANGENT
 CROWN: 0.016 FT/FT
 COORDINATES: LATITUDE N39°57'34.51"
 LONGITUDE W83°20'43.63"

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| | | |
|--|-----------|-------------|
| PARSONS 100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235 | DATE | 3/17 |
| | REVIEWED | RWB |
| MADISON COUNTY STA. 559+77.38 STA. 565+18.62 | DRAWN | RLG |
| | DESIGNED | JRE |
| SITE PLAN BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 | CHECKED | JLW |
| | REVISIONS | FILE NUMBER |
| MAD-29-10.61 PID No. 104867 | STRUCTURE | 4900243 |
| | DATE | 3/17 |

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

| | | |
|-----------|---------|----------|
| AS-1-15 | REVISED | 07-17-15 |
| AS-2-15 | REVISED | 01-18-19 |
| GSD-1-19 | REVISED | 01-18-19 |
| SBR-1-13 | REVISED | 07-20-18 |
| SICD-1-96 | REVISED | 07-08-14 |
| SICD-2-14 | DATED | 07-08-14 |
| VPF-1-90 | REVISED | 07-20-18 |

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

| | | |
|-----|-------|----------|
| 800 | DATED | 01-15-21 |
|-----|-------|----------|

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002 AND THE ODOT BRIDGE DESIGN MANUAL.

SPECIAL DESIGN SPECIFICATIONS

THIS BRIDGE REQUIRED THE USE OF A THREE-DIMENSIONAL MODEL USING THE FINITE ELEMENT DESIGN METHOD TO ANALYZE THE STRUCTURE TO CHECK GIRDER TWISTING DURING PLACEMENT OF THE DECK. THE COMPUTER PROGRAM USED FOR STRUCTURAL ANALYSIS WAS LARSA. THE BRIDGE COMPONENTS DESIGNED BY THIS METHOD WERE THE CROSS FRAMES FOR THE DECK PLACEMENT.

THIS BRIDGE ALSO REQUIRED THE USE OF A TWO-DIMENSIONAL MODEL USING THE LINE GIRDER DESIGN METHOD TO ANALYZE AND LOAD RATE THE EXISTING GIRDERS. THE COMPUTER PROGRAM USED FOR STRUCTURAL ANALYSIS WAS AASHTOWARE BRIDGE RATING.

THE BRIDGE LOAD DISTRIBUTIONS USED IN THIS PROGRAM WERE:

DEAD LOAD DISTRIBUTION: SLAB DEAD LOADS WERE DISTRIBUTED IN RELATION TO GIRDER SPACING. FUTURE WEARING SURFACE AND PARAPET LOADS WERE DISTRIBUTED EQUALLY TO ALL GIRDERS.

LIVE LOAD DISTRIBUTION FACTORS: LIVE LOADS WERE DISTRIBUTED TO ALL GIRDERS PER AASHTO SPECIFICATIONS.

DESIGN LOADING

SUPERSTRUCTURE HS20, CASE II AND THE ALTERNATE MILITARY LOADING FUTURE WEARING SURFACE (FWS) OF 60 LBS/SF

DESIGN DATA

CONCRETE CLASS QC2 COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)
REINFORCING STEEL ASTM A615 OR A996, GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI
STRUCTURAL STEEL ASTM A709 GRADE 50 YIELD STRENGTH 50,000 PSI

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL
2-1/2" CONCRETE COVER

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

PROPOSED WORK

THE WORK TO BE COMPLETED INCLUDES THE COMPLETE REPLACEMENT OF THE BRIDGE DECK AND PARAPETS, APPROACH SLABS, CONVERT THE EXISTING ABUTMENTS TO SEMI-INTEGRAL ABUTMENTS, REPLACEMENT OF APPROACH GUARD RAIL, REHABILITATION OF ABUTMENTS, CONCRETE PATCHING OF THE PIERS AND INCIDENTAL ITEMS ASSOCIATED WITH THE ABOVE WORK.

DECK PLACEMENT DESIGN ASSUMPTIONS

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 1.76 KIPS FOR A TOTAL MACHINE LOAD OF 14.1 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

ITEM 202. PORTIONS OF STRUCTURE REMOVED. OVER 20 FOOT SPAN. AS PER PLAN

DESCRIPTION: THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECK INCLUDING PARAPETS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS FRAMES, ETC.) AND THE REMOVAL OF INTERMEDIATE STEEL BRACING AS INDICATED ON SHEET 15/30 AND END CROSS FRAMES AT THE ABUTMENTS. THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SAVED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF THE DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

MEASUREMENT AND PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM 514. FIELD PAINTING STRUCTURAL STEEL. INTERMEDIATE COAT

ITEM 514. FIELD PAINTING STRUCTURAL STEEL. FINISH COAT

THE FINISH COAT FOR ALL STRUCTURAL STEEL SHALL BE FEDERAL COLOR NUMBER 16440 (GREY).

ITEM 511. CLASS QC2 CONCRETE. BRIDGE DECK. AS PER PLAN

LOCATE THE LOWER CONTACT POINT OF THE OVERHANG FALSE WORK NO MORE THAN 76 INCHES +/- 2 IN. BELOW THE BOTTOM OF THE GIRDER'S TOP FLANGE. THE BRACKET CONTACT POINT LOCATION REQUIREMENTS OF C&S 508 DO NOT APPLY.

ITEM 513 STRUCTURAL STEEL. MISC.: ADDITIONAL INTERMEDIATE BRACING MEMBERS

ALL REQUIREMENTS OF 513 APPLY TO SHOP FABRICATED MEMBERS. STEEL MEMBERS INCLUDED IN THIS ITEM INCLUDE THE ADDED L3X3X5/16 BOTTOM CHORD ANGLES AS NOTED ON SHEET 15/30.

ITEM 516 JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE. AS PER PLAN

THIS WORK CONSISTS OF RAISING AND TEMPORARILY SUPPORTING THE EXISTING STRUCTURE TO ALLOW REPLACEMENT OF THE EXISTING BEARINGS AT THE ABUTMENTS AND PIERS AS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

THE JACKING OPERATIONS SHALL TAKE PLACE AFTER THE EXISTING CONCRETE DECK AND PARAPETS ARE REMOVED AND BEFORE THE NEW DECK IS PLACED. IF, DURING THE JACKING OPERATIONS, DAMAGE OR DISTRESS TO THE EXISTING STEEL GIRDERS AND BRACING IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. THE DEPARTMENT WILL NOT PAY FOR THE COST OF REQUIRED REPAIRS. THE NEW BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 519 PATCHING CONCRETE STRUCTURE. AS PER PLAN

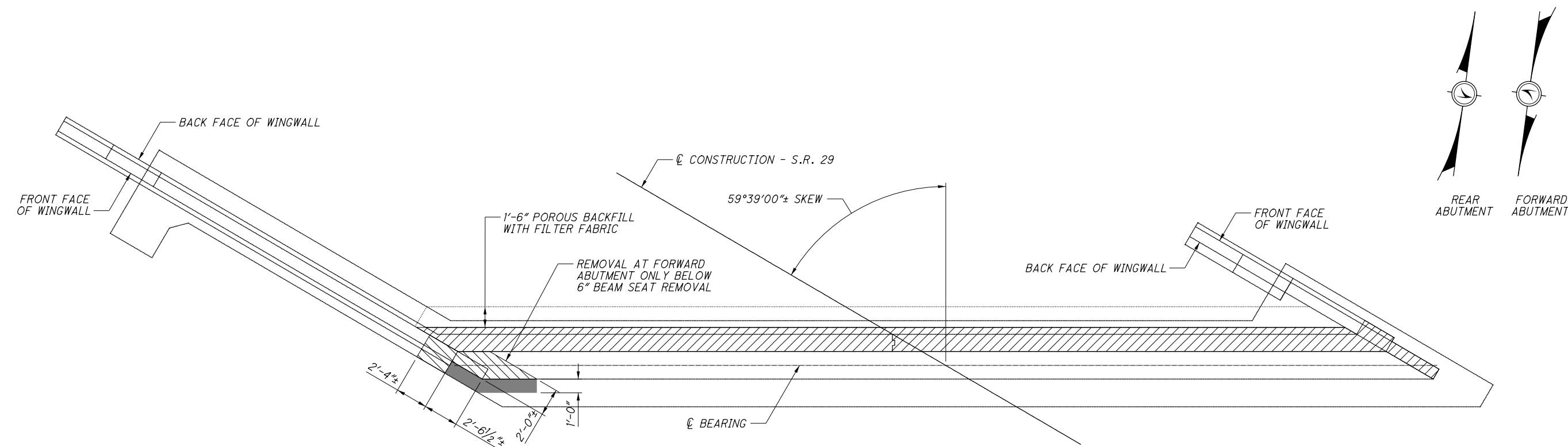
PRIOR TO SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

| | | | |
|--|-------|--------------------------|---------|
| PARSONS 100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235 | | DATE | 3/17 |
| | | REVIEWED | RWB |
| DESIGNED | JRE | CHECKED | JLW |
| | DRAWN | GF | REVISED |
| GENERAL NOTES | | STRUCTURE FILE NUMBER | 4900243 |
| MAD - 29 - 10.61 | | BRIDGE NO. MAD-SR29-1061 | |
| PID No. 104867 | | OVER I.R. 70 | |
| 3 / 30 | | 49 76 | |

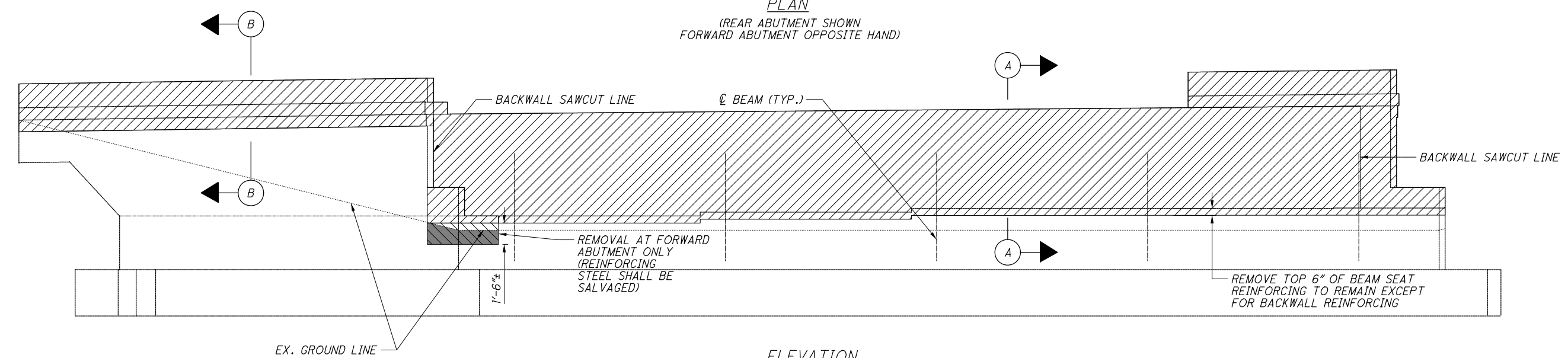
p:\ANV\A01PW\NT01\parsons.com:Ohio State\Documents\MAD-70-08.62\05 - Design\CAD\104867\structures\MAD-29-1061\Sheets\029_1061C_SQ001.dgn_Sheet - 4/30/2020 3:00:15 PM - p003821B

| ESTIMATED QUANTITIES | | | | | | | | | | |
|----------------------|----------|--------|------|---|-----|------|-------|--------|------------|--|
| ITEM | ITEM EXT | TOTAL | UNIT | DESCRIPTION | GEN | ABUT | PIERS | SUPER | REF. SHEET | |
| 202 | 11203 | 1 | LS | PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN | 1 | | | | 15/30 | |
| 202 | 22900 | 176 | SY | APPROACH SLAB REMOVED | 176 | | | | | |
| 503 | 21100 | 163 | CY | UNCLASSIFIED EXCAVATION | | 163 | | | | |
| 509 | 10000 | 172799 | LB | EPOXY COATED REINFORCING STEEL | | 1360 | | 171439 | | |
| 510 | 10000 | 272 | EACH | DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT | | 84 | 188 | | | |
| 511 | 33501 | 8 | EACH | SEMI-INTEGRAL DIAPHRAGM GUIDE, AS PER PLAN | | 8 | | | 23/30 | |
| 511 | 34447 | 697 | CY | CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN | | | | 697 | 3/30 | |
| 511 | 34450 | 178 | CY | CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET) | | 14 | | 164 | | |
| 511 | 44110 | 15 | CY | CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING | | 15 | | | | |
| 512 | 10050 | 1756 | SY | SEALING OF CONCRETE SURFACES (NON-EPOXY) | | 142 | 381 | 1233 | | |
| 513 | 20001 | 4080 | EACH | WELDED STUD SHEAR CONNECTORS, AS PER PLAN | | | | 4080 | 16/30 | |
| 513 | 90000 | 6438 | LB | STRUCTURAL STEEL, MISC.: ADDITIONAL INTERMEDIATE BRACING MEMBERS | | | | 6438 | 3/30 | |
| 513 | 95020 | 1 | LS | STRUCTURAL STEEL, MISC.: FIELD DRILLED HOLES IN EXISTING GIRDERS | | | | 1 | 15/30 | |
| 514 | 00050 | 56262 | SF | SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL | | | | 56262 | | |
| 514 | 00056 | 56262 | SF | FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT | | | | 56262 | | |
| 514 | 00060 | 57327 | SF | FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT | | | | 57327 | | |
| 514 | 00066 | 57327 | SF | FIELD PAINTING STRUCTURAL STEEL, FINISH COAT | | | | 57327 | | |
| 514 | 00504 | 45 | MNHR | GRINDING FINES, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL | | | | 45 | | |
| 514 | 10000 | 26 | EACH | FINAL INSPECTION REPAIR | | | | 26 | | |
| 516 | 10010 | 129 | FT | ARMORLESS PREFORMED JOINT SEAL | 129 | | | | | |
| 516 | 13600 | 126 | SF | 1" PREFORMED EXPANSION JOINT FILLER | | 126 | | | | |
| 516 | 13900 | 210 | SF | 2" PREFORMED EXPANSION JOINT FILLER | | 210 | | | | |
| 516 | 25000 | 388 | SF | NYLON REINFORCED NEOPRENE SHEETING | | 388 | | | | |
| 516 | 44201 | 15 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (22" x 26" x 3.80" WITH 23" x 27" x 1.5" PLATE) | | | 15 | | 18/30 | |
| 516 | 44401 | 10 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (17.5" x 17.5" x 5.70" WITH 23" x 20" x 1.5" PLATE) | | | 10 | | 18/30 | |
| 516 | 46501 | 10 | EACH | BEARING, PTFE (TEFLON), AS PER PLAN | | | 10 | | 18/30 | |
| 516 | 47001 | 1 | LS | JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN | | | | 1 | 3/30 | |
| 518 | 21200 | 68 | CY | POROUS BACKFILL WITH GEOTEXTILE FABRIC | | 68 | | | | |
| 519 | 11101 | 222 | SF | PATCHING CONCRETE STRUCTURE, AS PER PLAN | | 82 | 140 | | 3/30 | |
| 526 | 30000 | 217 | SY | REINFORCED CONCRETE APPROACH SLABS (T=17") | 217 | | | | | |
| 526 | 90030 | 129 | FT | TYPE C INSTALLATION | 129 | | | | | |
| 607 | 39900 | 1074 | FT | VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC | | | | 1074 | | |

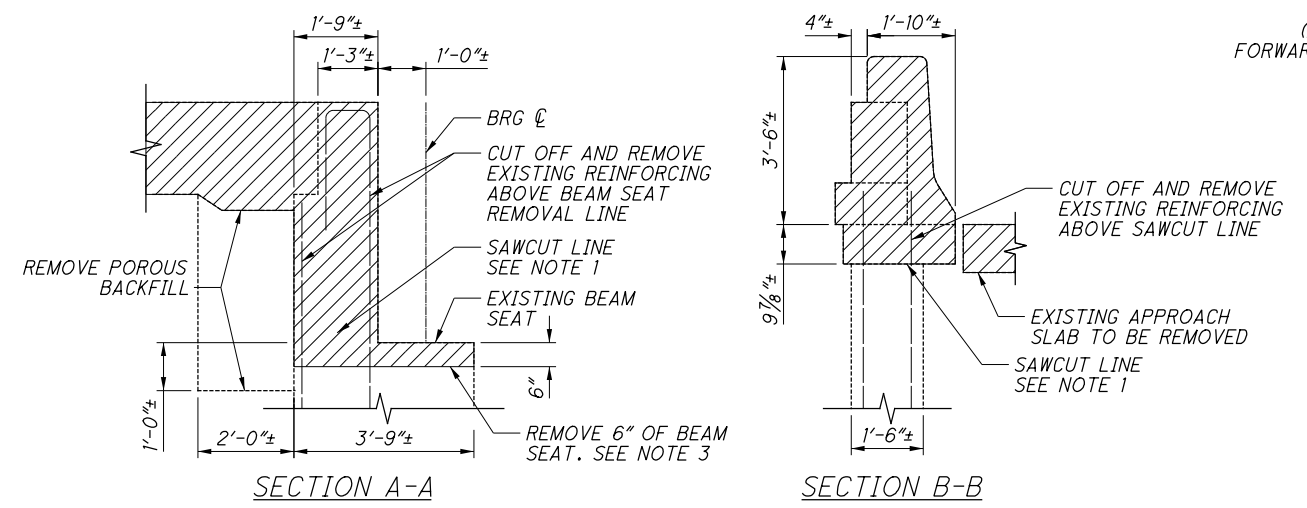
| | | |
|--|-------------|----------------------------------|
| PARSONS 100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235 | | DATE 3/17 |
| | | STRUCTURE FILE NUMBER 4900243 |
| REVIEWED RWB | DRAWN GF | CHECKED JLW |
| ESTIMATED QUANTITIES BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 | | |
| MAD-29-10.61 PID No. 104867 | | |
| 4/30 | | |
| 50 76 | | |



PLAN
(REAR ABUTMENT SHOWN
FORWARD ABUTMENT OPPOSITE HAND)



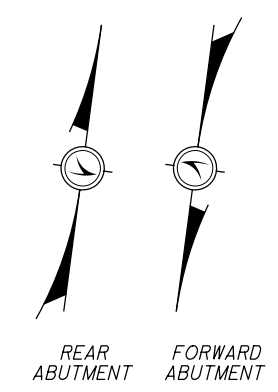
ELEVATION
(REAR ABUTMENT SHOWN
FORWARD ABUTMENT OPPOSITE HAND)



LEGEND:

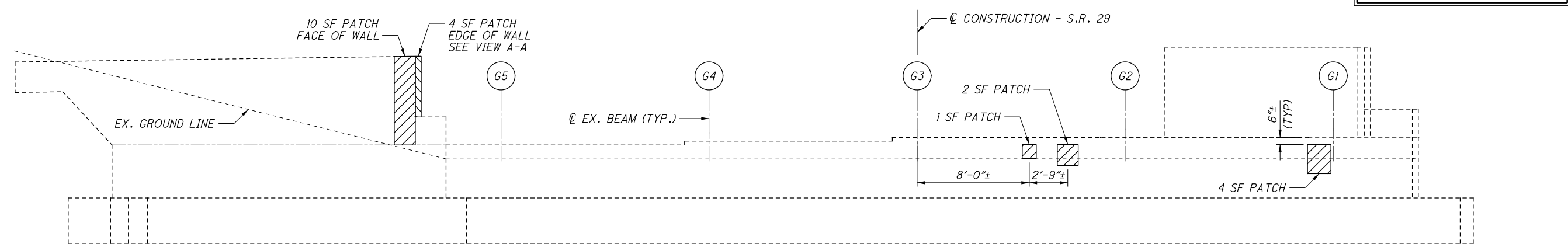
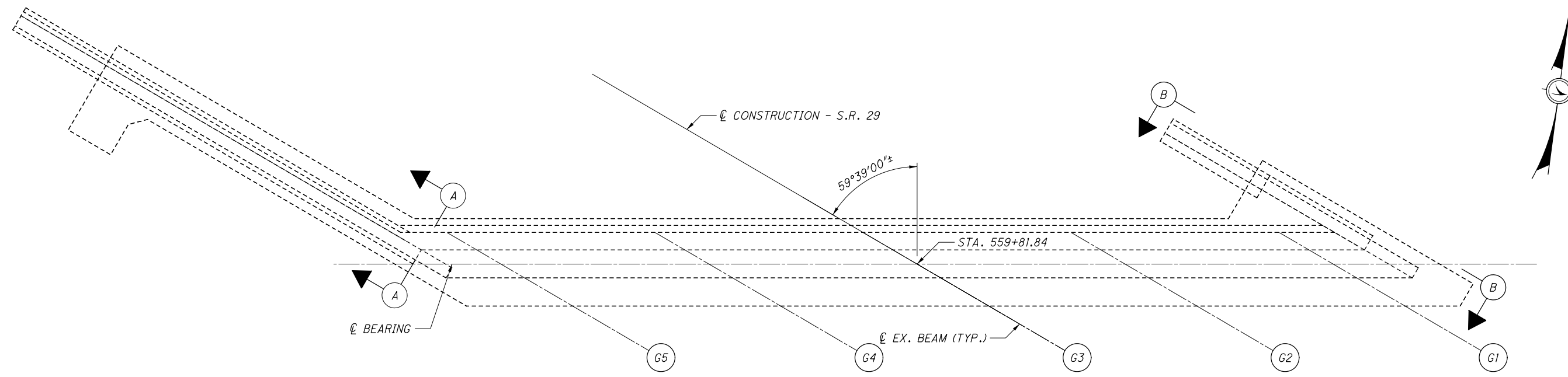
- INDICATES AREA OF CONCRETE TO BE REMOVED.
- INDICATES ADDITIONAL CONCRETE AREA AT FORWARD ABUTMENT TO BE REMOVED.
- INDICATES LIMITS OF UNCLASSIFIED EXCAVATION (FORWARD ABUTMENT ONLY)

- NOTES:**
- CUT OFF AND REMOVE EXISTING BACKWALL REINFORCING ABOVE SAWCUT LINE. BEAM SEAT REINFORCING TO REMAIN.
 - ABUTMENT BACKWALL AND PARAPET REMOVAL SHALL BE PER ITEM 202 PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN. FOR ADDITIONAL STRUCTURAL REMOVAL INFORMATION SEE STRUCTURAL GENERAL NOTES SHEET 3/30.
 - ABUTMENT REINFORCING WITHIN THE 6" BEAM SEAT REMOVAL SHALL BE SALVAGED. CARE SHALL BE TAKEN DURING ABUTMENT BEAM SEAT REMOVAL SO AS NOT TO DAMAGE THE REINFORCING STEEL TO BE REUSED. EXPOSED REINFORCING STEEL TO BE REUSED SHALL BE REPAIRED WITH EPOXY COATING PER C.M.S. SECTION 509. THE COST OF EPOXY COATING INCLUDING ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THE REPAIRS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 202-PORIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN. ALL OTHER EXISTING ABUTMENT REINFORCING STEEL WITHIN THE REMOVAL LIMITS SHALL BE REMOVED.

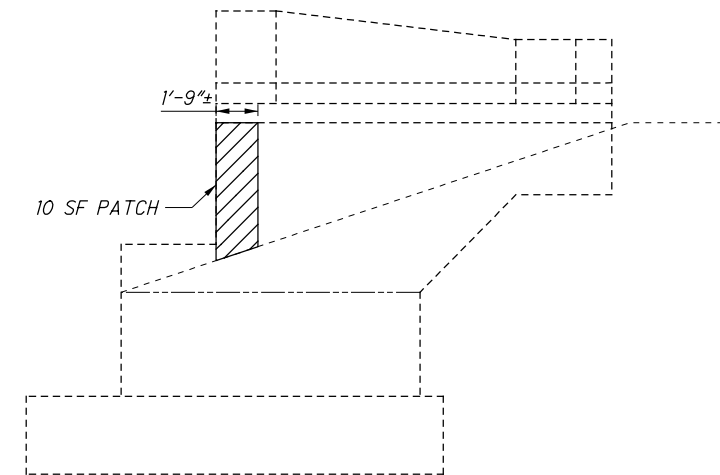
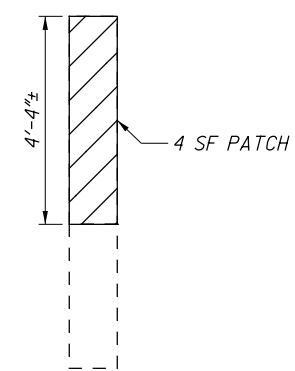


| | |
|---|----------------------------------|
| PARSONS <small>100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235</small> | DATE 3/17 |
| REVIEWED RWB | STRUCTURE FILE NUMBER 4900243 |
| DRAWN JRE | REVISED |
| DESIGNED JRE | CHECKED JLW |
| ABUTMENT REMOVAL LIMITS BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 | |
| MAD-29-10.61 | PID No. 104867 |
| 5 / 30 | 51 / 76 |

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CONCRETE PATCHING TOTAL
REAR ABUTMENT = 31 SF

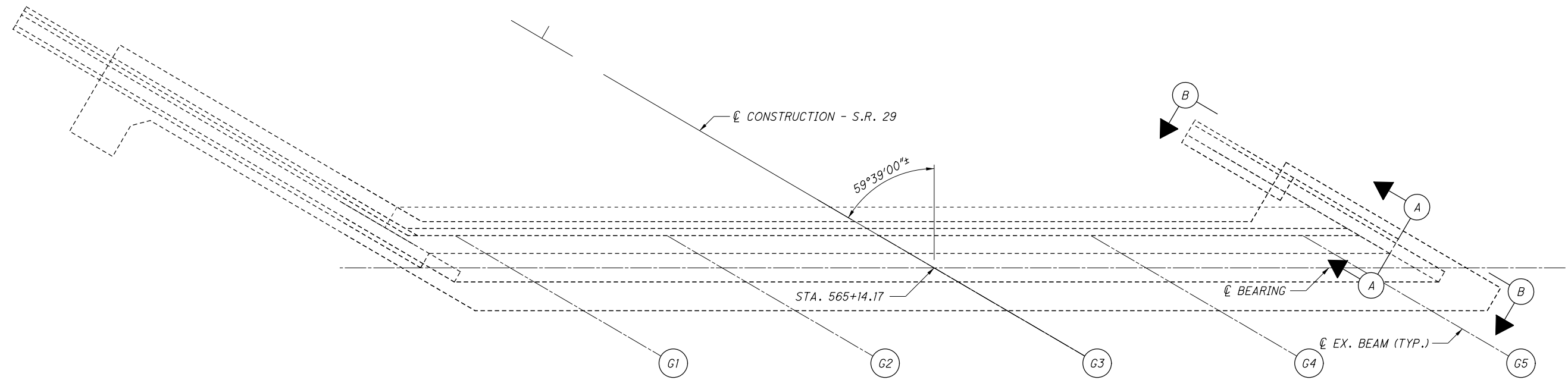


LEGEND
▨ PATCH AREA

NOTE:
1. CONCRETE PATCHING DEPTH SHALL BE IN ACCORDANCE WITH ITEM 519.03.

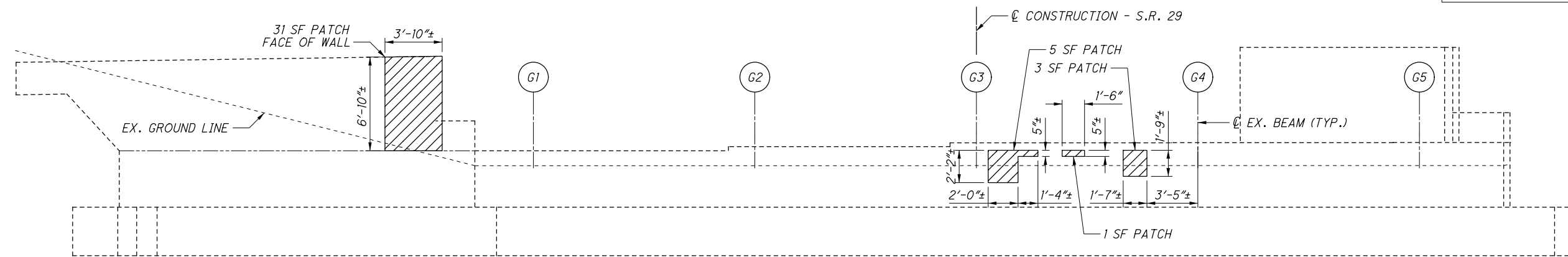
| | |
|--|-------------------|
| PARSONS 100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235 | |
| DESIGNED GF | CHECKED JLW |
| DRAWN GF | REVISED |
| REVIEWED RWB | DATE 3/17 |
| STRUCTURE FILE NUMBER 4900243 | |
| REAR ABUTMENT CONCRETE PATCHING BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 | |
| MAD-29-10.61 PID No. 104867 | 6 / 30 52 / 76 |

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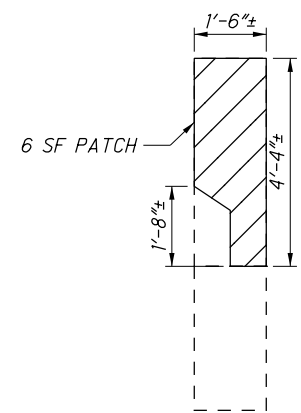


PLAN

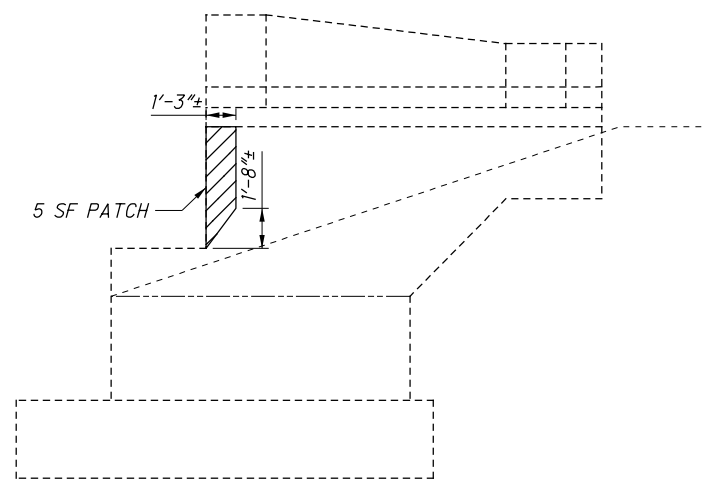
CONCRETE PATCHING TOTAL
FORWARD ABUTMENT = 51 SF



ELEVATION



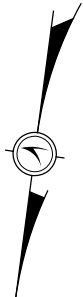
VIEW A-A
EDGE OF WALL



VIEW B-B

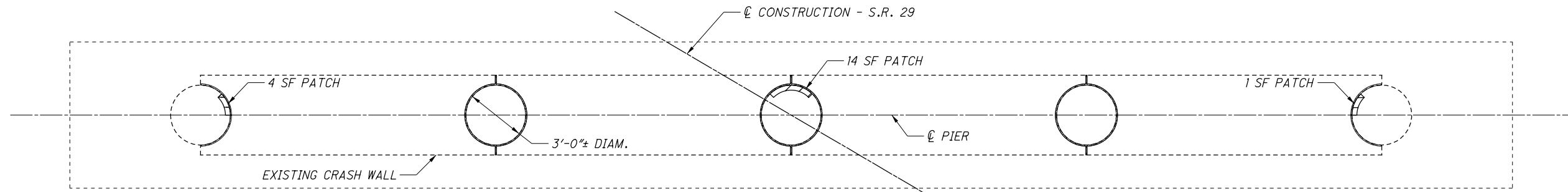
LEGEND
 PATCH AREA

NOTE:
 1. CONCRETE PATCHING DEPTH SHALL BE IN ACCORDANCE WITH ITEM 519.03.



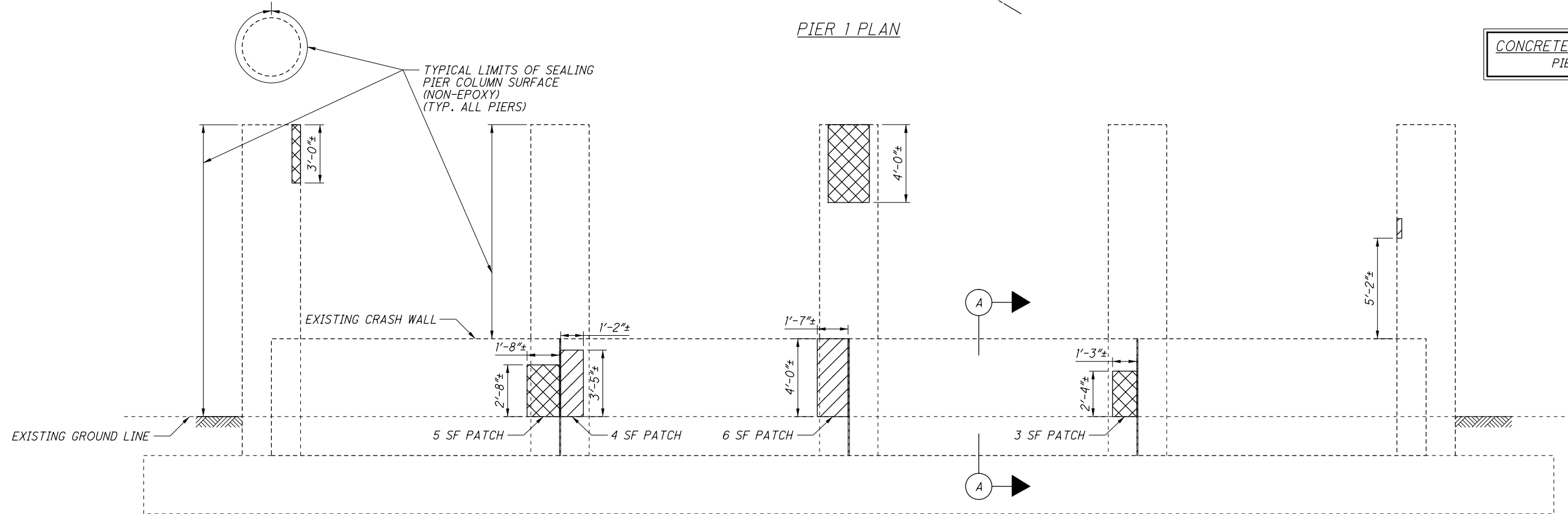
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|--|----------------------------------|
| PARSONS 100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235 | DATE 3/17 |
| | REVIEWED RWB |
| DRAWN GF | STRUCTURE FILE NUMBER 4900243 |
| DESIGNED GF | CHECKED JLW |
| FORWARD ABUTMENT CONCRETE PATCHING BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 | |
| MAD-29-10.61 PID No. 104867 | 7/30 53 76 |

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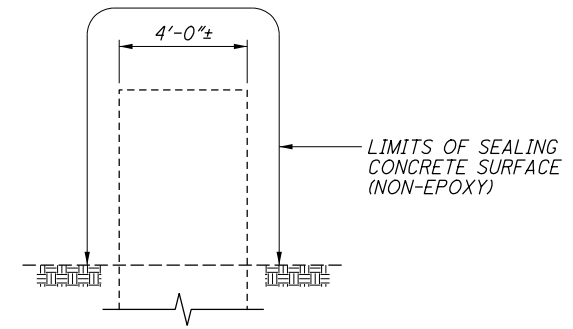


PIER 1 PLAN

CONCRETE PATCHING TOTAL
PIER 1 = 37 SF



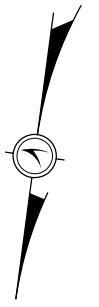
PIER 1 ELEVATION
LOOKING UP STATION



SECTION A-A
(TYP. PIERS 1 & 2)

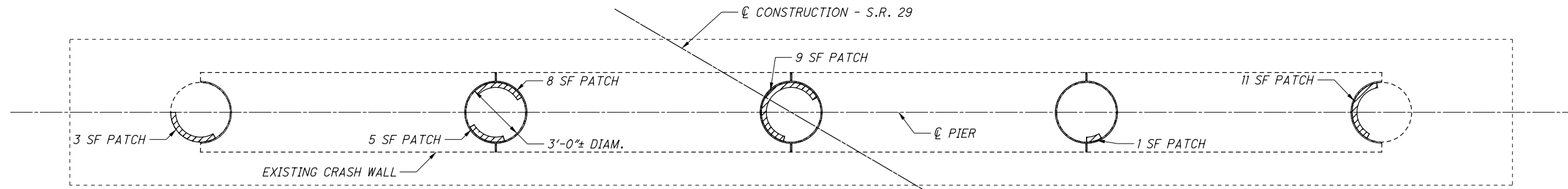
LEGEND
 PATCH AREA, NEAR SIDE
 PATCH AREA, FAR SIDE

NOTE:
1. CONCRETE PATCHING DEPTH SHALL BE IN ACCORDANCE WITH ITEM 519.03.



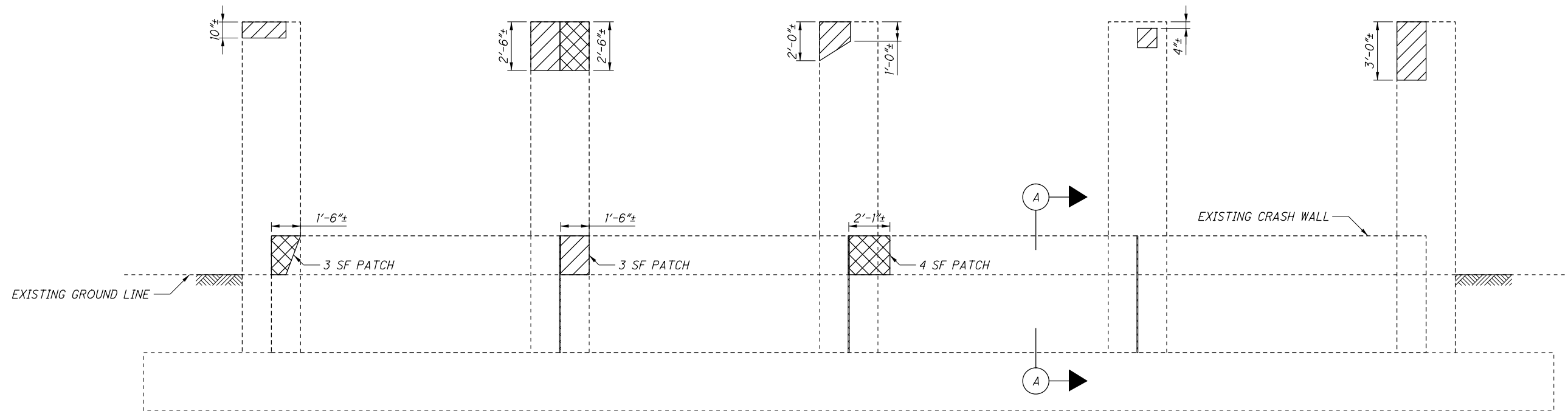
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|--|----------|---------|---------|-----|-------|----|---------|--|----------|-----|------|------|-----------------------|--|---------|--|
| <p>PARSONS 100 E. Campus View Blvd., Suite 250 • Columbus, OH 43235</p> | | | | | | | | | | | | | | | | |
| <p>MAD-29-10.61 PID No. 104867</p> | | | | | | | | | | | | | | | | |
| <p>PIER 1 CONCRETE PATCHING BRIDGE NO. MAD-SR29-1061 OVER I.R. 70</p> | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DESIGNED</td> <td>GF</td> <td>CHECKED</td> <td>JLW</td> </tr> <tr> <td>DRAWN</td> <td>GF</td> <td>REVISED</td> <td></td> </tr> <tr> <td>REVIEWED</td> <td>RWB</td> <td>DATE</td> <td>3/17</td> </tr> <tr> <td colspan="2">STRUCTURE FILE NUMBER</td> <td colspan="2">4900243</td> </tr> </table> | DESIGNED | GF | CHECKED | JLW | DRAWN | GF | REVISED | | REVIEWED | RWB | DATE | 3/17 | STRUCTURE FILE NUMBER | | 4900243 | |
| DESIGNED | GF | CHECKED | JLW | | | | | | | | | | | | | |
| DRAWN | GF | REVISED | | | | | | | | | | | | | | |
| REVIEWED | RWB | DATE | 3/17 | | | | | | | | | | | | | |
| STRUCTURE FILE NUMBER | | 4900243 | | | | | | | | | | | | | | |
| <p>8 / 30</p> <p style="font-size: 24px; border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">54 76</p> | | | | | | | | | | | | | | | | |

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PIER 2 PLAN

CONCRETE PATCHING TOTAL
PIER 2 = 47 SF



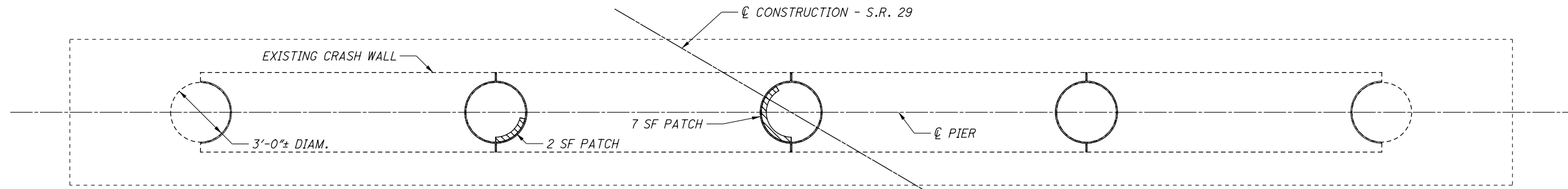
PIER 2 ELEVATION
LOOKING UP STATION

LEGEND
 PATCH AREA, NEAR SIDE
 PATCH AREA, FAR SIDE

NOTE:
 1. CONCRETE PATCHING DEPTH SHALL BE IN ACCORDANCE WITH ITEM 519.03.
 2. SEE SHEET 8/30 FOR SECTION A-A AND LIMITS OF SEALING CONCRETE SURFACES.

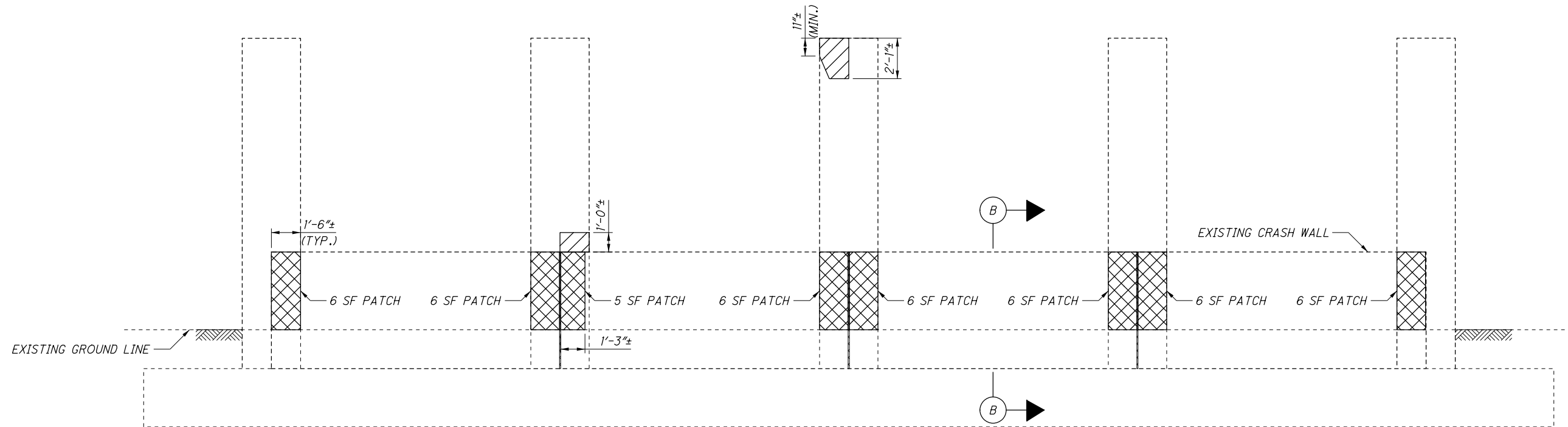
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|---|--------------------------|-----------------|----------------------------------|----------------|----------------|
| PARSONS <small>100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235</small> | DATE 3/17 | REVIEWED RWB | STRUCTURE FILE NUMBER 4900243 | DRAWN GF | REVISSED |
| MAD-29-10.61 | PIER 2 CONCRETE PATCHING | | BRIDGE NO. MAD-SR29-1061 | DESIGNED GF | CHECKED JLW |
| PID No. 104867 | OVER I.R. 70 | | OVER I.R. 70 | | |
| 9/30 | 55 | | | | |
| | | 76 | | | |

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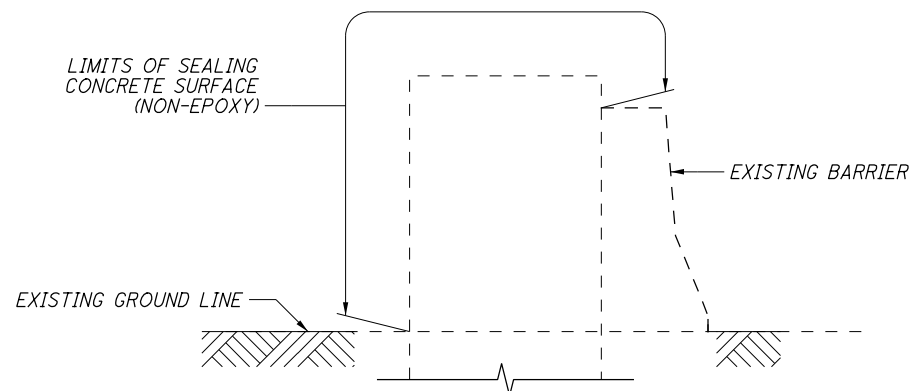


PIER 3 PLAN

CONCRETE PATCHING TOTAL
PIER 3 = 56 SF



PIER 3 ELEVATION
LOOKING UP STATION



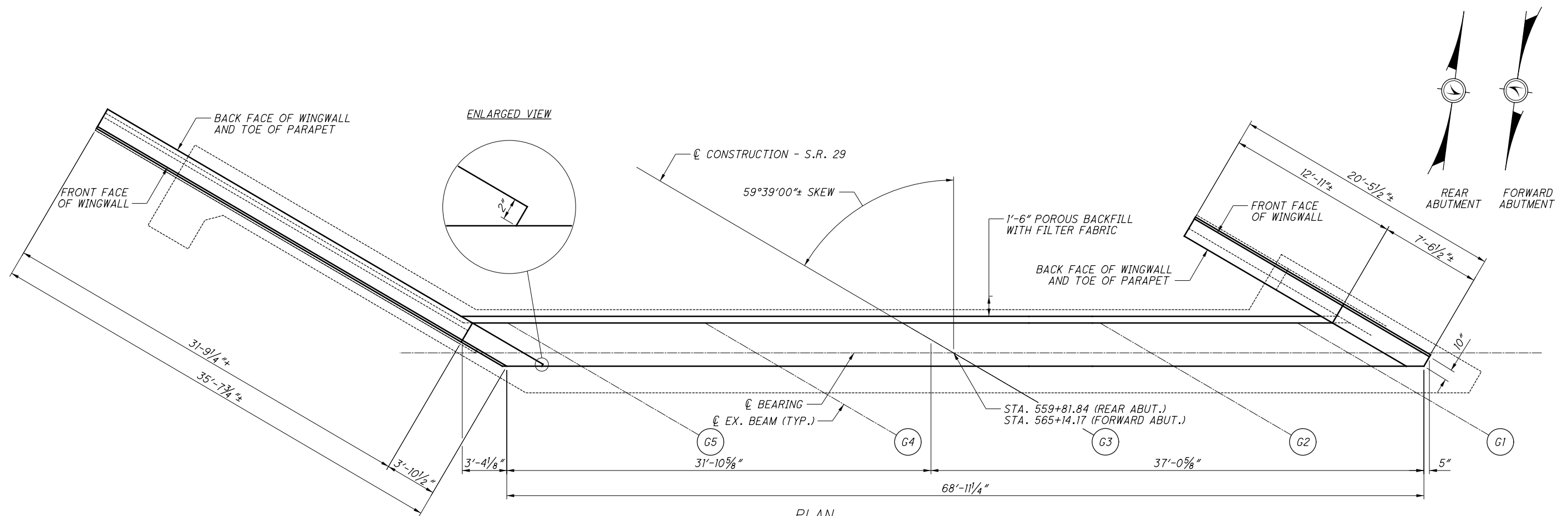
SECTION B-B
PIER 3 ONLY

LEGEND
 PATCH AREA, NEAR SIDE
 PATCH AREA, FAR SIDE

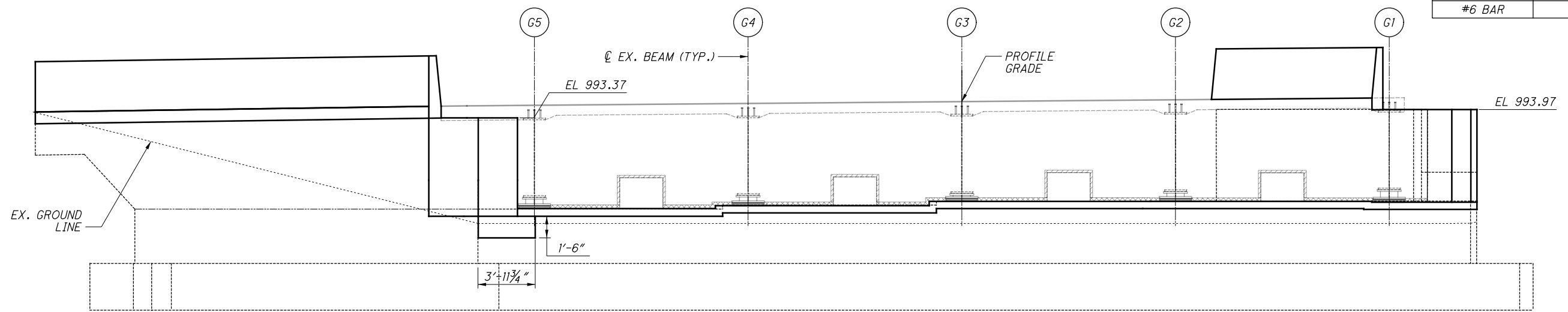
NOTE:
 1. CONCRETE PATCHING DEPTH SHALL BE IN ACCORDANCE WITH ITEM 519.03.
 2. SEE SHEET 8/30 FOR LIMITS OF SEALING CONCRETE SURFACES.

| | | |
|---|-------------------|----------------------------------|
| PARSONS 100 E. Campus View Blvd., Suite 250 • Columbus, OH 43235 | | |
| DRAWN GF | REVISIONS RWB | DATE 3/17 |
| DESIGNED GF | CHECKED JLW | STRUCTURE FILE NUMBER 4900243 |
| PIER 3 CONCRETE PATCHING BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 | | |
| MAD-29-10.61 PID No. 104867 | 10/30 56 76 | |

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PLAN
(REAR ABUTMENT SHOWN,
FORWARD ABUTMENT
OPPOSITE HAND)



ELEVATION
(REAR ABUTMENT SHOWN,
FORWARD ABUTMENT
OPPOSITE HAND)

| BEAM SEAT ELEVATIONS | | | | | |
|----------------------|--------|--------|--------|--------|--------|
| GIRDER | G1 | G2 | G3 | G4 | G5 |
| REAR ABUT | 987.51 | 987.56 | 987.57 | 987.27 | 987.07 |
| FORWARD ABUT | 986.97 | 987.30 | 987.60 | 987.57 | 987.53 |

LEGEND
E.F. - EACH FACE

NOTES:

- FOR ADDITIONAL NOTES, SEE SHEET 12/30.
- THE PREFIX "RA" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE REAR ABUTMENT, THE PREFIX "FA" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE FORWARD ABUTMENT UNLESS OTHERWISE NOTED.
- FOR SEMI-INTEGRAL GUIDE DETAILS, SEE SHEET 23/30.

PARSONS
100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235

| | | | |
|-----------------------|-----|---------|------|
| DESIGNED | JRE | CHECKED | JLW |
| DRAWN | JRE | REVISED | |
| REVIEWED | RWB | DATE | 3/17 |
| STRUCTURE FILE NUMBER | | 4900243 | |

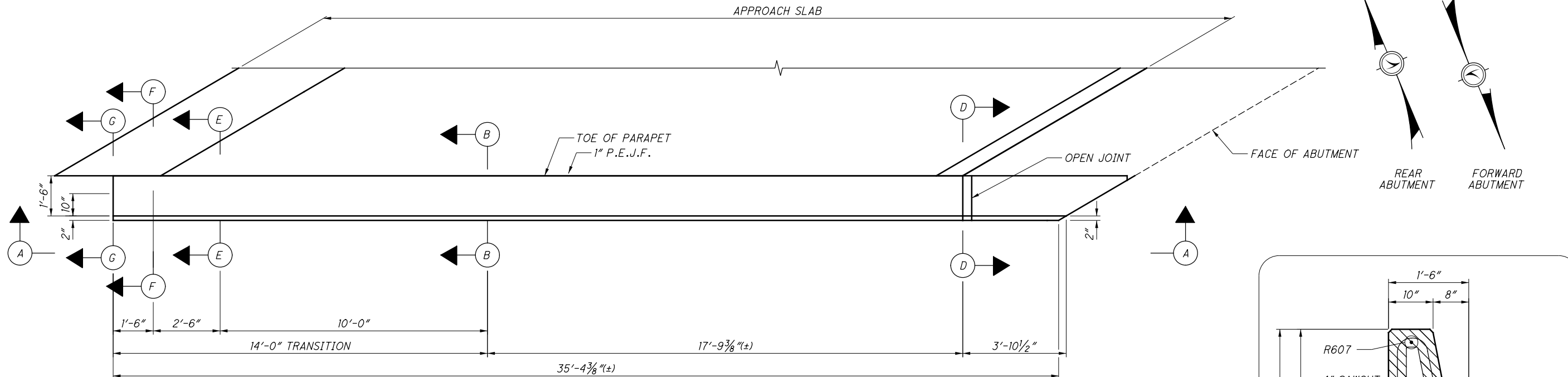
ABUTMENT PLAN AND ELEVATION
BRIDGE NO. MAD-SR29-1061
OVER I.R. 70

MAD-29-10.61
PID No. 104867

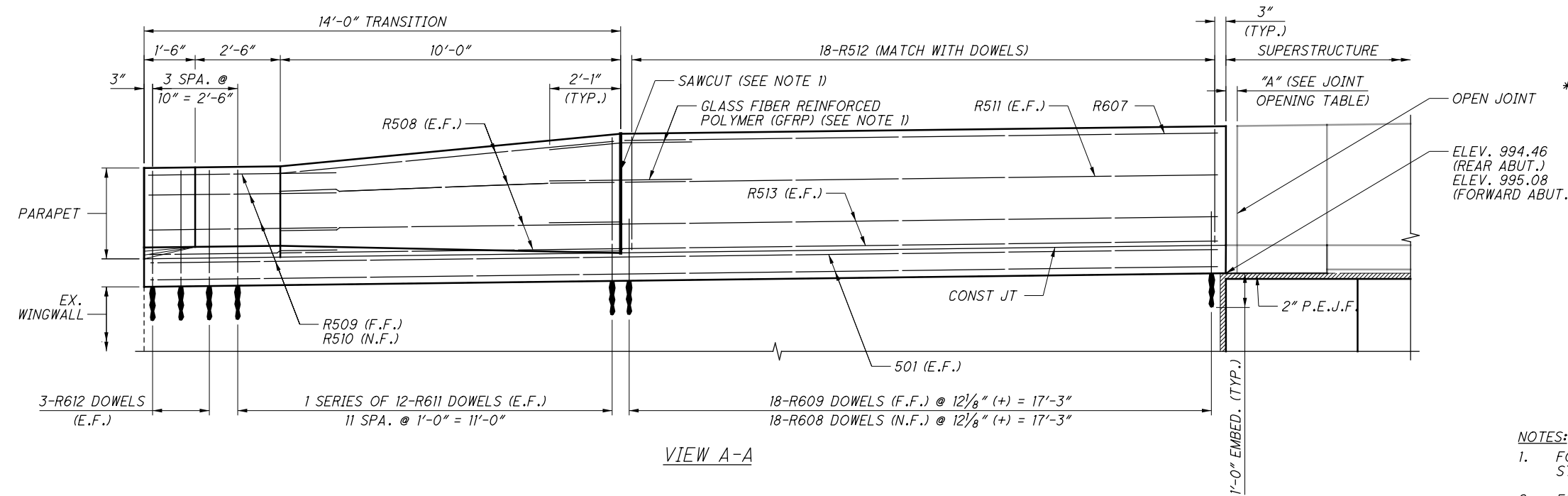
11/30

57/76

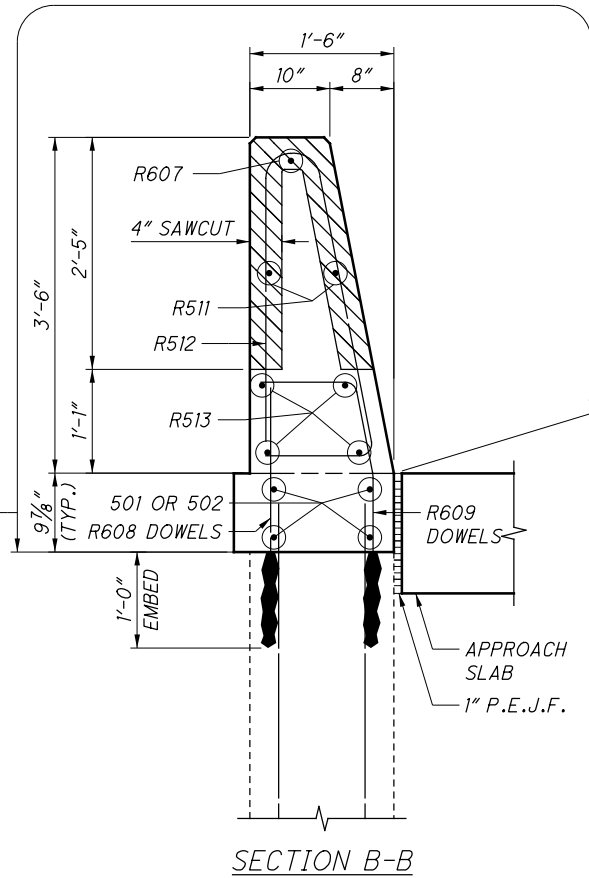
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WINGWALL PLAN
(RIGHT WINGWALL, REAR ABUTMENT)
(LEFT WINGWALL, FORWARD ABUTMENT)



VIEW A-A



SECTION B-B

| REQUIRED MIN. LAP LENGTHS ◇ | |
|-----------------------------|--------|
| #5 BAR | 2'-11" |
| #6 BAR | 3'-5" |

◇ UNLESS OTHERWISE NOTED.

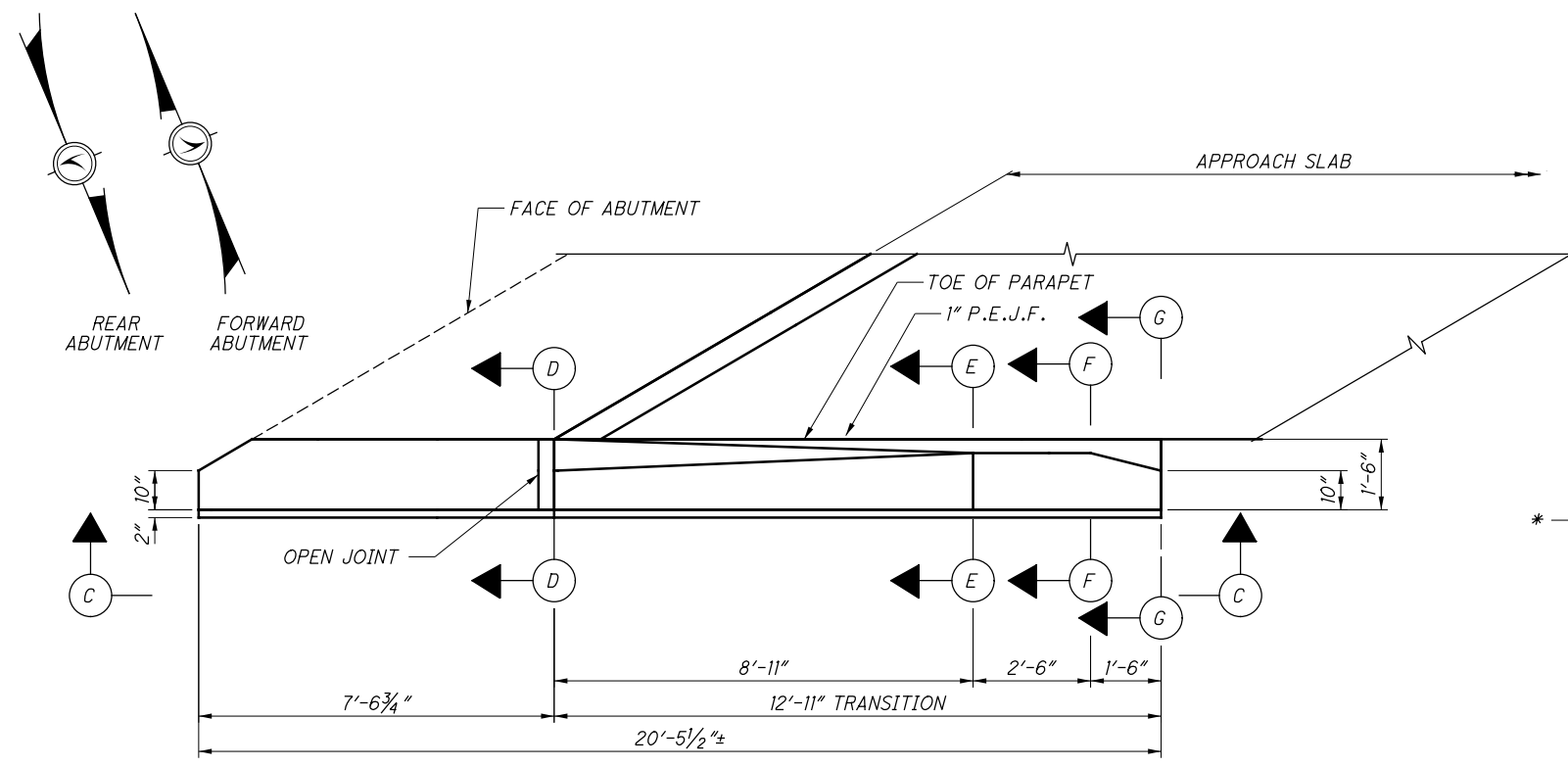
LEGEND
F.F. - FAR FACE
N.F. - NEAR FACE
E.F. - EACH FACE
* - LIMITS OF SEALING OF CONCRETE SURFACES (NON-EPOXY)

| JOINT OPENING TABLE (INCHES) | | | | | | | |
|------------------------------|-------|-------|-------|----|-------|-------|-------|
| TEMPERATURE | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| DIMENSION "A" | 3 3/4 | 3 1/2 | 3 1/4 | 3 | 2 3/4 | 2 1/2 | 2 1/4 |

- NOTES:**
- FOR ADDITIONAL SAWCUT DETAILS AND GFRP NOTES, SEE STD. DWG. SBR-1-13.
 - FOR SECTIONS D-D, E-E, F-F, AND G-G, SEE SHEET 13/30.
 - THE PREFIX "RA" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE REAR ABUTMENT, THE PREFIX "FA" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE FORWARD ABUTMENT UNLESS OTHERWISE NOTED.
 - ABUTMENT PARAPET CONCRETE SHALL BE INCLUDED IN ITEM 511 - CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET), FOR PAYMENT.

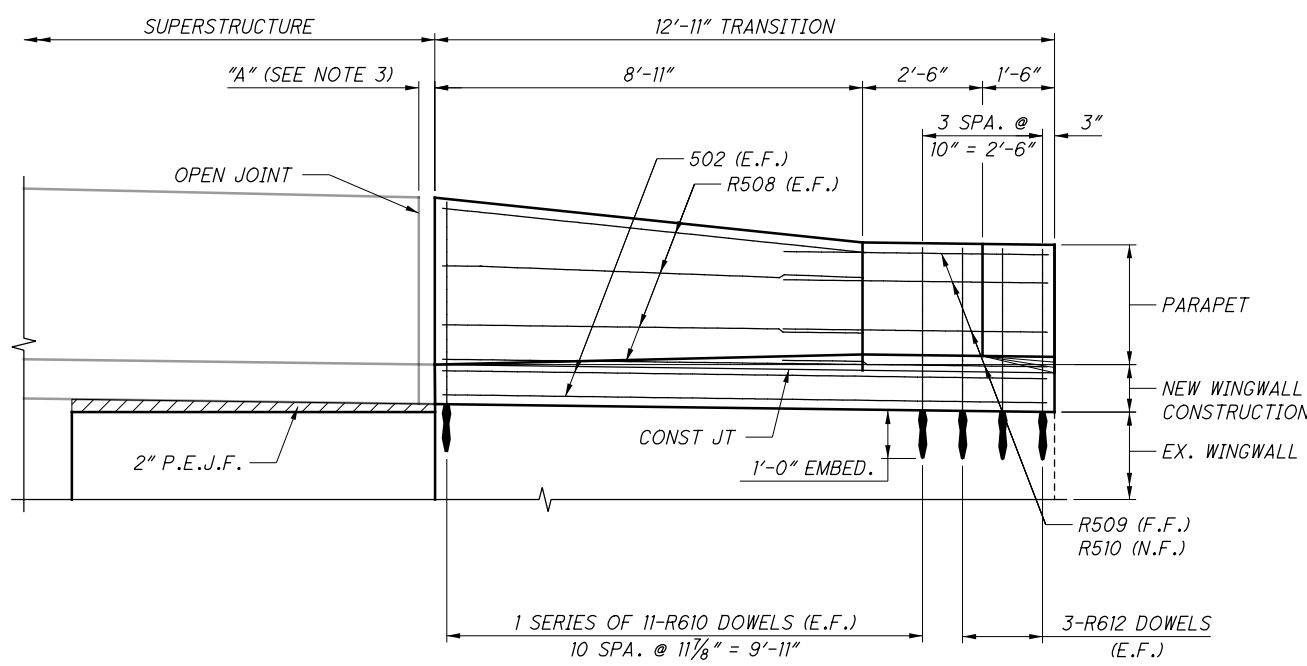
| | | |
|--|-----------------------|------|
| PARSONS 100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235 | DATE | 3/17 |
| | REVIEWED | RWB |
| | DRAWN | JRE |
| | DESIGNED | JRE |
| STRUCTURE FILE NUMBER | 4900243 | |
| REVISER | JLW | |
| CHECKED | JLW | |
| ABUTMENT DETAILS - 1 | | |
| BRIDGE NO. MAD-SR29-1061 | | |
| OVER I.R. 70 | | |
| MAD-29-10.61 | PID No. 104867 | |
| 12/30 | | 58 |
| 76 | | |

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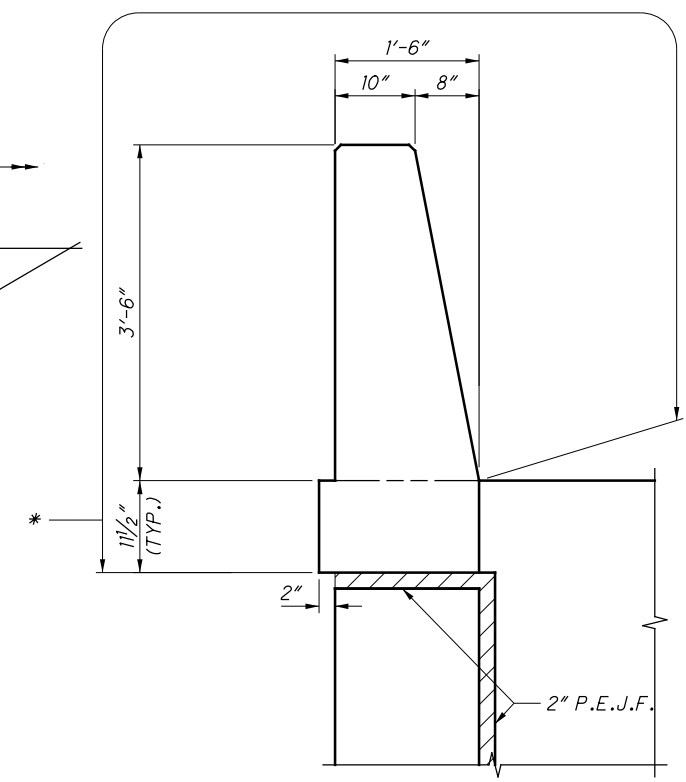
WINGWALL PLAN

(LEFT WINGWALL REAR ABUTMENT)
(RIGHT WINGWALL FORWARD ABUTMENT)

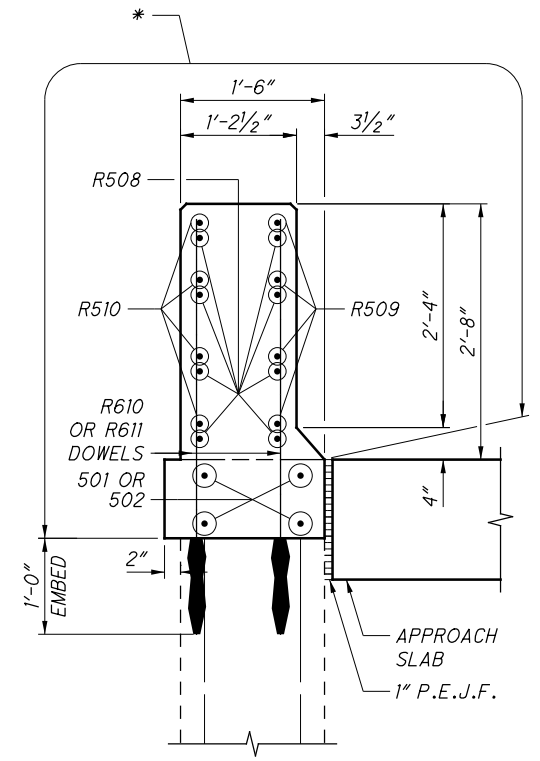


VIEW C-C

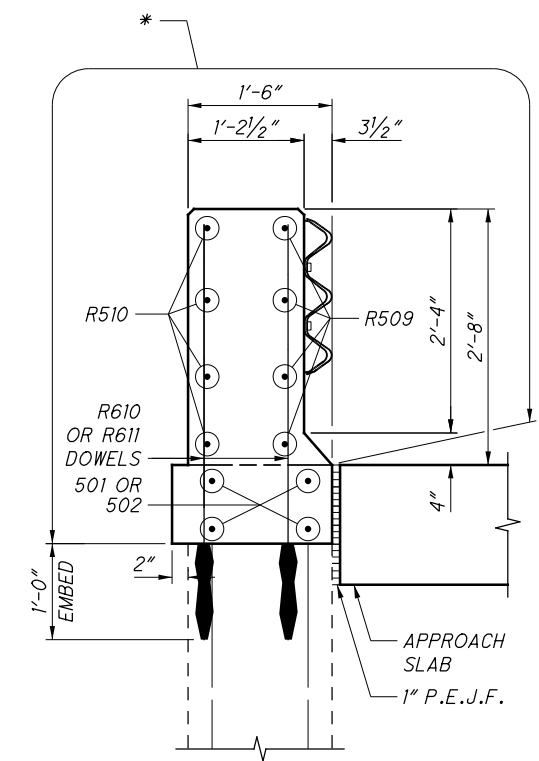
| REQUIRED MIN. LAP LENGTHS ◊ | |
|-----------------------------|--------|
| #5 BAR | 2'-11" |
| #6 BAR | 3'-5" |
| ◊ UNLESS OTHERWISE NOTED. | |



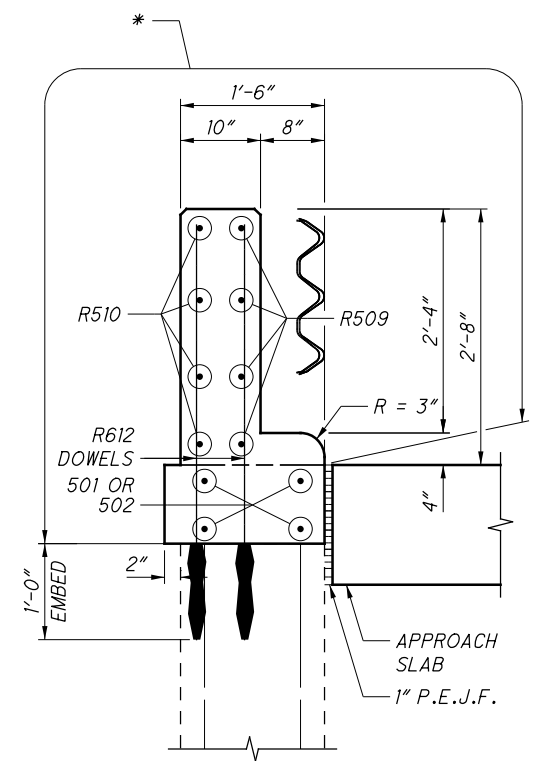
SECTION D-D
(GFRP NOT SHOWN)



SECTION E-E



SECTION F-F



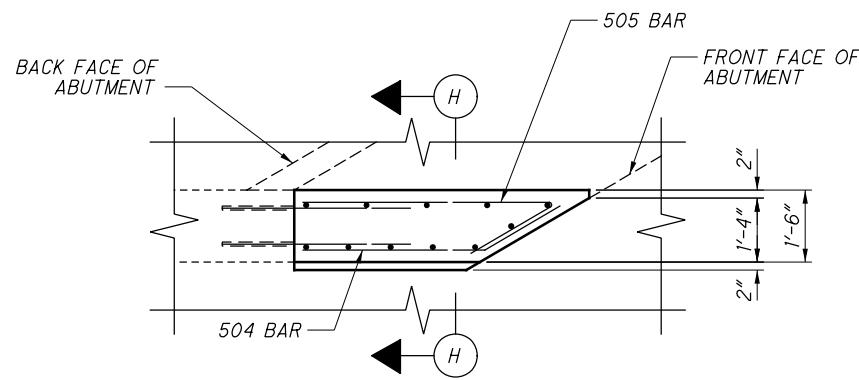
SECTION G-G

LEGEND
 F.F. - FAR FACE
 N.F. - NEAR FACE
 E.F. - EACH FACE
 * - LIMITS OF SEALING OF CONCRETE SURFACES (NON-EPOXY)

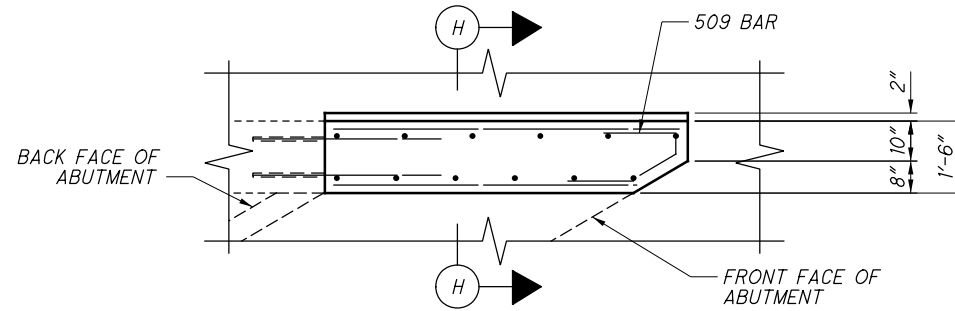
- NOTES:
- FOR ADDITIONAL SAWCUT DETAILS AND GFRP NOTES, SEE STD. DWG. SBR-1-13.
 - FOR ABUTMENT PLAN AND ELEVATION, SEE SHEET 11/30.
 - FOR JOINT OPENING TABLE AND ADDITIONAL NOTES, SEE SHEET 12/30.

| | | | | | |
|---------------------------------------|--|-----------------|--------------|----------------------------------|---|
| MAD-29-10.61 PID No. 104867 | ABUTMENT DETAILS - 2 BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 | DESIGNED JRE | DRAWN MAW | REVIEWED RWB | DATE 3/17 |
| | | CHECKED JLW | REVISED | STRUCTURE FILE NUMBER 4900243 | PARSONS 100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235 |
| | | 13 / 30 | | 59 / 76 | |

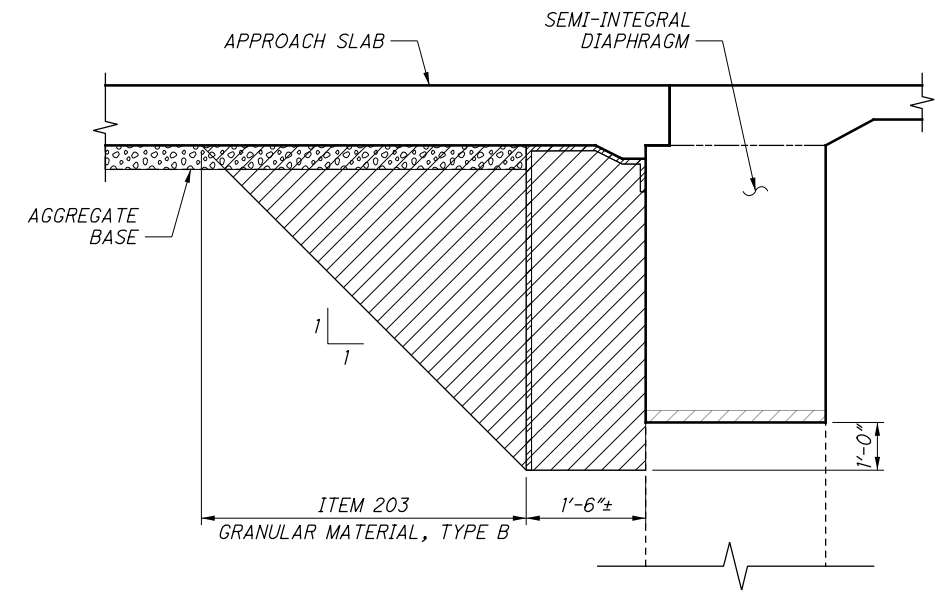
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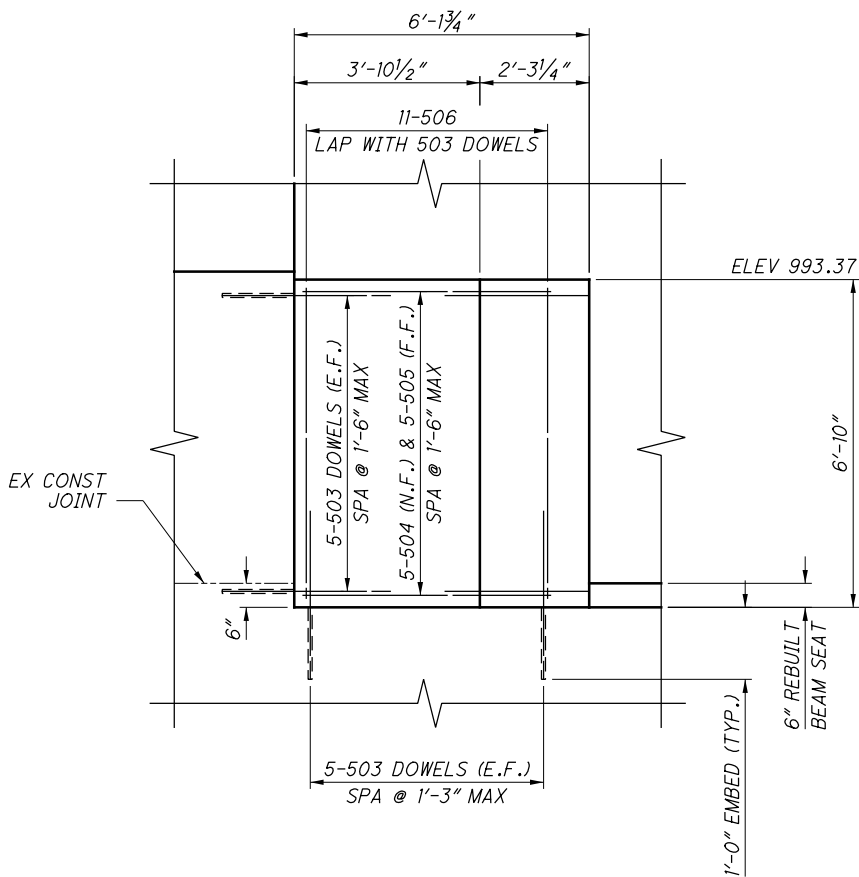
PLAN - CURTAIN WALL
NW AND SE CORNERS



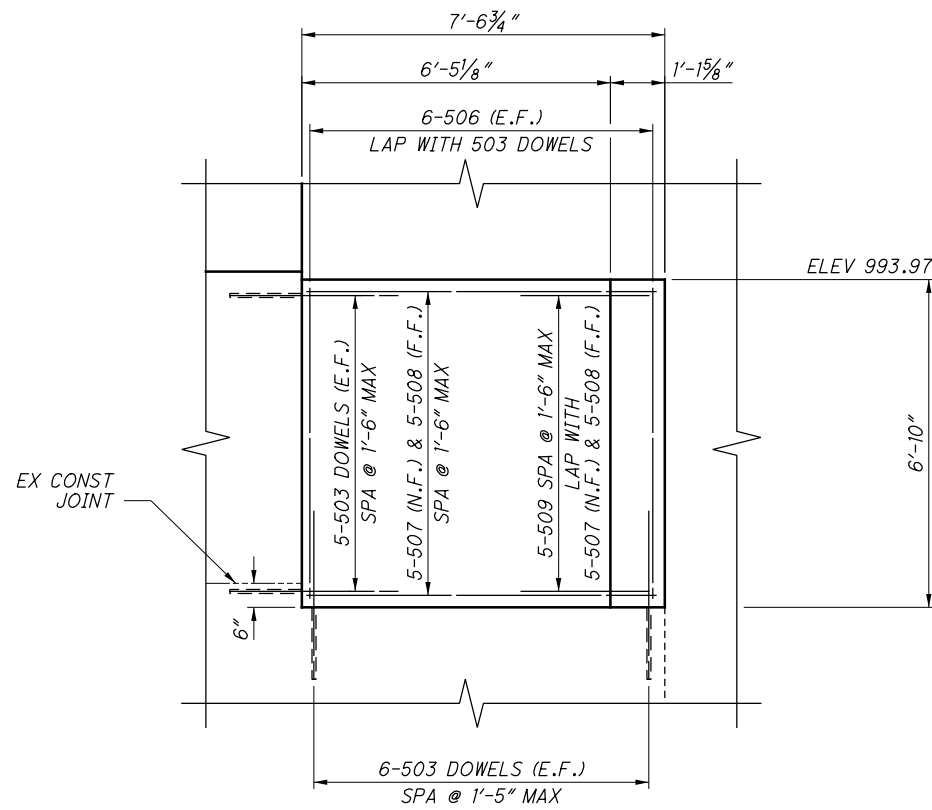
PLAN - CURTAIN WALL
SW AND NE CORNERS



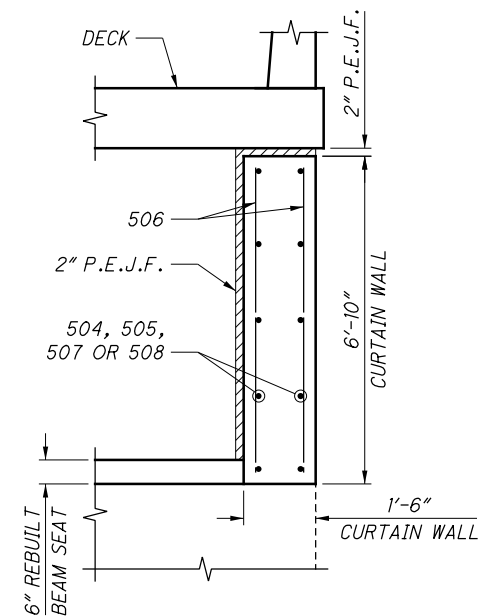
LIMITS OF UNCLASSIFIED EXCAVATION



ELEVATION - CURTAIN WALL
NW AND SE CORNERS



ELEVATION - CURTAIN WALL
SW AND NE CORNERS



SECTION H-H
SECTION THROUGH CURTAIN WALL
(DOWELS NOT SHOWN FOR CLARITY)

LEGEND

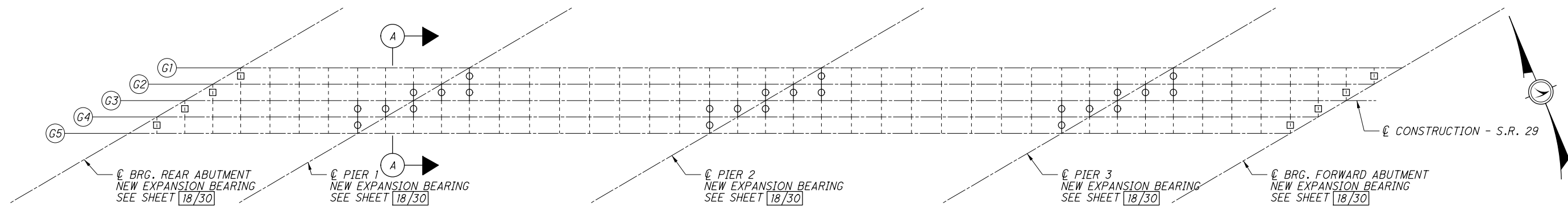
F.F. - FAR FACE
N.F. - NEAR FACE
E.F. - EACH FACE

NOTES:

1. THE PREFIX "RA" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE REAR ABUTMENT, THE PREFIX "FA" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE FORWARD ABUTMENT UNLESS OTHERWISE NOTED.

| | | | |
|-----------------------|---------|---------|------|
| DESIGNED | MAW | CHECKED | JLW |
| DRAWN | MAW | REVISED | |
| REVIEWED | RWB | DATE | 3/17 |
| STRUCTURE FILE NUMBER | 4900243 | | |

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FRAMING PLAN

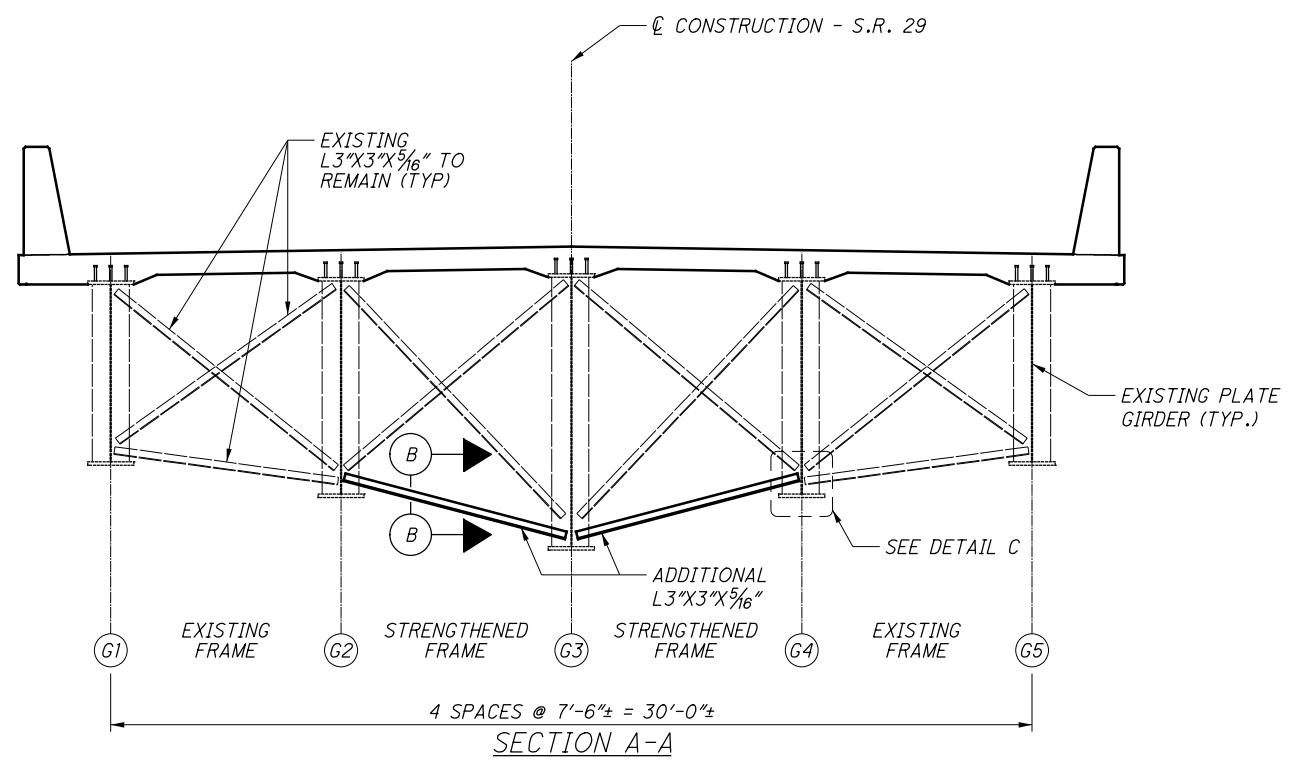
ADDITIONAL BRACING FOR CONCRETE DECK REPLACEMENT

NOTES:

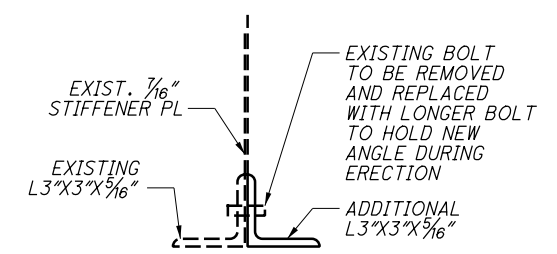
1. THE CONTRACTOR SHALL INSTALL TEMPORARY BRACING FOR THE EXTERIOR GIRDERS AT THE ABUTMENTS TO RESIST OVERTURNING FROM OVERHANG LOADS DURING DECK PLACEMENT.

LEGEND

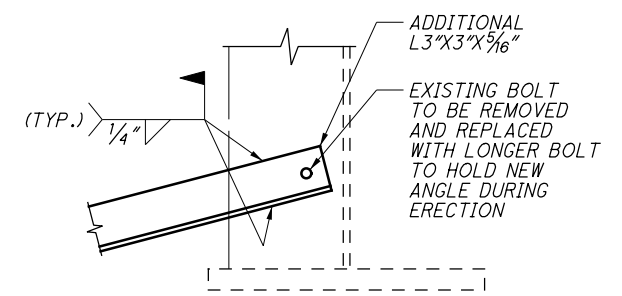
- INDICATES CROSS-FRAMES WHERE ADDITIONAL BOTTOM BRACE ANGLE TO BE INSTALLED PRIOR TO CONCRETE DECK REPLACEMENT
- INDICATES CROSS-FRAMES TO BE REMOVED PRIOR TO PLACEMENT OF SEMI-INTEGRAL ABUTMENT DIAPHRAGM. COST FOR REMOVAL SHALL BE INCLUDED IN THE ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.



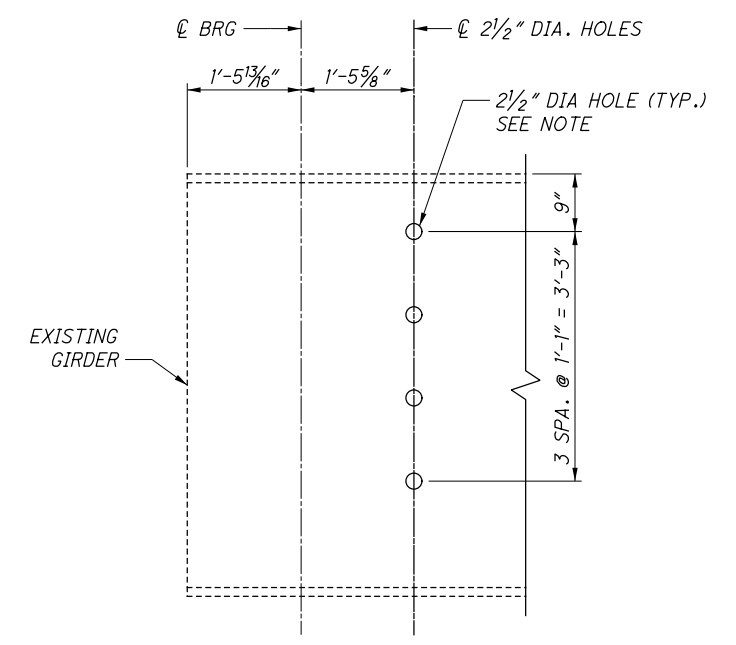
SECTION A-A



SECTION B-B



DETAIL C

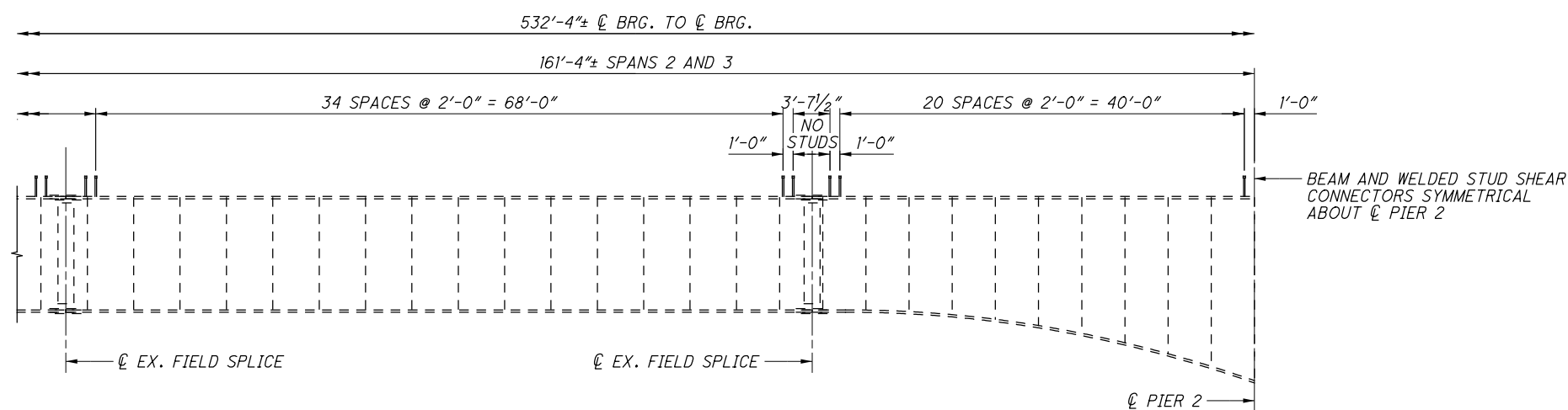
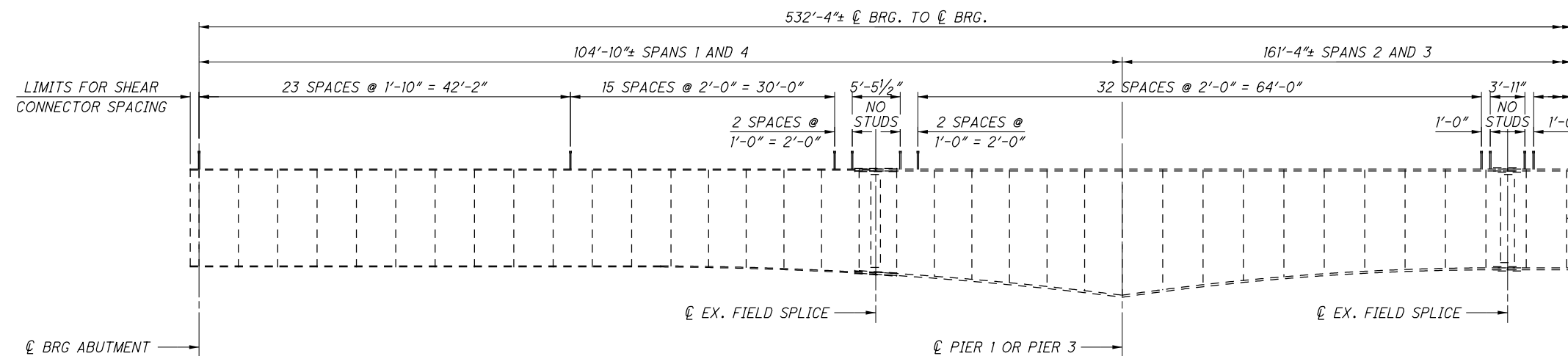


FIELD DRILLING DETAIL

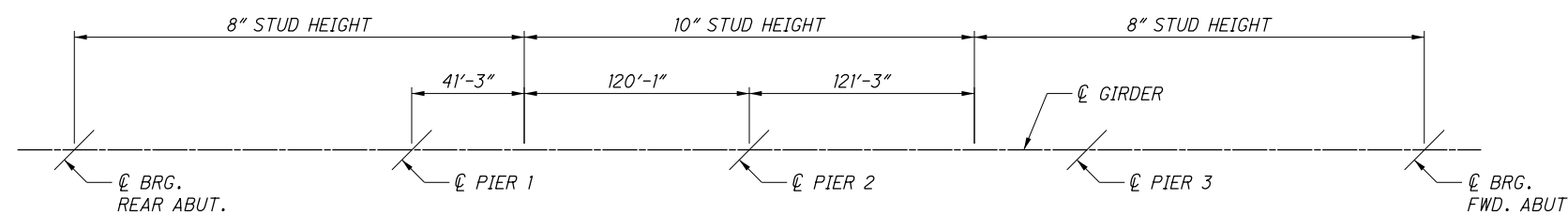
(AT ABUTMENT ENDS ONLY)
NOTE: HOLES SHALL BE FIELD DRILLED
COST TO BE INCLUDED IN ITEM 913 STRUCTURAL STEEL MISC.:
FIELD DRILLED HOLES IN EXISTING GIRDERS

| | | |
|---|----------------------------------|--------------|
| | | DATE 3/17 |
| REVIEWED RWB | STRUCTURE FILE NUMBER 4900243 | DATE 3/17 |
| DRAWN GF | REVISED | DATE 3/17 |
| DESIGNED TMB | CHECKED TBS | DATE 3/17 |
| FRAMING PLAN & DETAILS BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 | | |
| MAD-29-10.61 PID No. 104867 | | |
| 15 / 30 | | 61 / 76 |

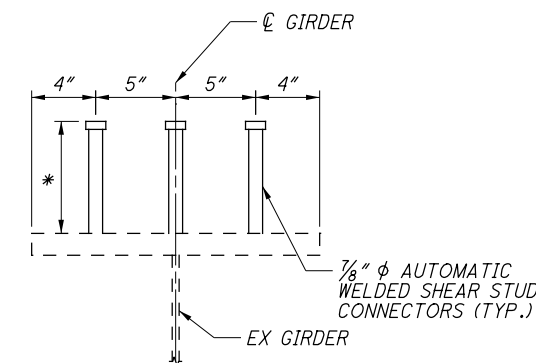
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PARTIAL GIRDER ELEVATION
SHEAR STUD CONNECTOR LAYOUT



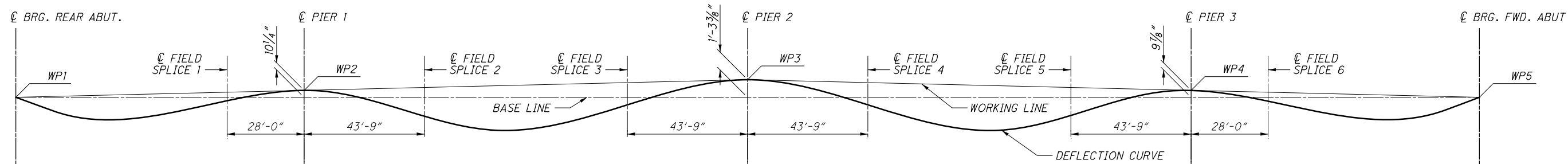
SHEAR STUD HEIGHT LOCATION DIAGRAM
TYPICAL ALL GIRDER LINES



* 8" SHEAR STUD OR 10" SHEAR STUD
SEE SHEAR STUD HEIGHT LOCATION DIAGRAM

SHEAR STUD CONNECTORS DETAIL

| | |
|--|----------------|
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| DESIGNED TMB | CHECKED TBS |
| DRAWN GF | REVISSED |
| REVIEWED RWB | DATE 3/17 |
| STRUCTURE FILE NUMBER 4900243 | |
| SHEAR STUD CONNECTOR LAYOUT BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 | |
| MAD-29-10.61 PID No. 104867 | |
| 16 / 30 | |
| 62 76 | |



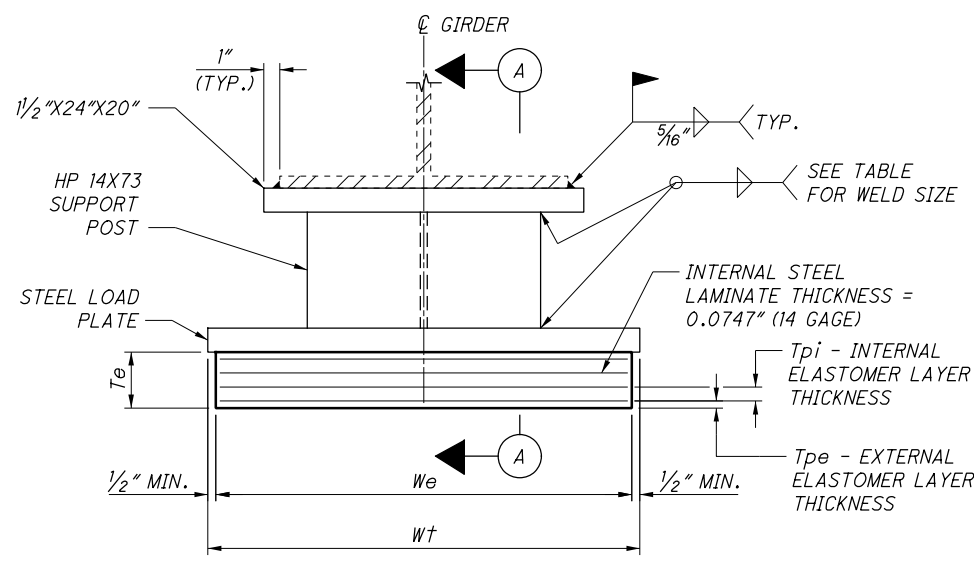
DEFLECTION DIAGRAM

NOTES:

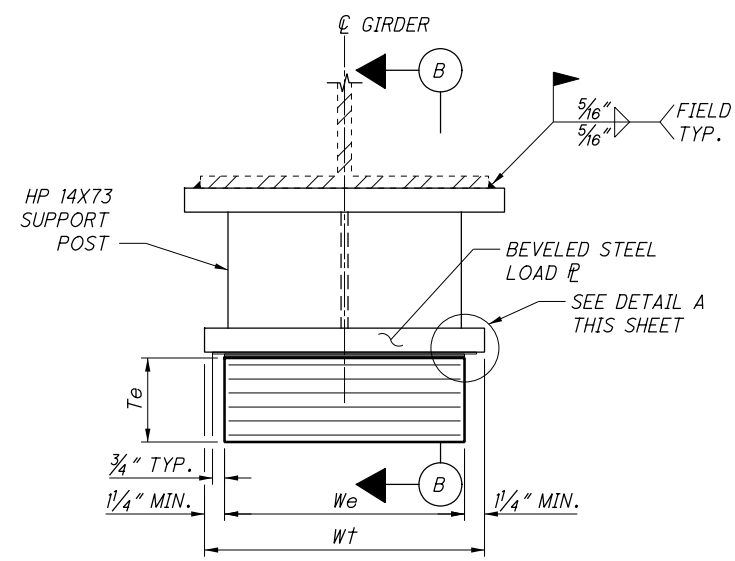
1. WORKING POINTS (WP) ARE AT BOTTOM OF TOP FLANGE AT \bar{C} BEARING.
2. THE BASE LINE IS A STRAIGHT LINE BETWEEN WORKING POINT 1 AND WORKING POINT 5.
3. THE WORKING LINE IS A STRAIGHT LINE BETWEEN INDICATED WORKING POINTS.
4. THE TABULATED DEFLECTION DATA IS MEASURED FROM THE WORKING LINE.
5. (-) DEFLECTIONS REPRESENT DOWNLOAD DEFLECTION.

| BEAM | POINT | REAR BRG. ABUT. | DEFLECTIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---------------------|-----------------|-------------|---------|---------|---------|---------|-------------|---------|---------|---------|---------|----------|---------|---------|---------|---------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------|---------|---------|---------|---------|---------|----------|
| | | | 1/5 PT. | 2/5 PT. | 3/5 PT. | F.S. #1 | 4/5 PT. | BRG. PIER 2 | 1/8 PT. | 1/4 PT. | F.S. #2 | 3/8 PT. | 1/2 PT. | 5/8 PT. | F.S. #3 | 3/4 PT. | 7/8 PT. | BRG. PIER 3 | 1/8 PT. | 1/4 PT. | F.S. #4 | 3/8 PT. | 1/2 PT. | 5/8 PT. | F.S. #5 | 3/4 PT. | 7/8 PT. | BRG. PIER 4 | 1/5 PT. | F.S. #6 | 2/5 PT. | 3/5 PT. | 4/5 PT. | FWD BRG. |
| 1 | NON-COMPOSITE SLAB | 0 | - 5/8 | - 3/4 | - 1/2 | - 3/16 | - 1/16 | 0 | - 5/16 | - 7/8 | - 15/16 | -1 3/8 | -1 1/2 | -1 5/16 | - 7/8 | - 13/16 | - 1/4 | 0 | - 1/16 | - 3/8 | - 7/16 | - 3/4 | - 15/16 | - 13/16 | - 9/16 | - 1/2 | - 1/8 | 0 | - 1/4 | - 7/16 | - 3/4 | - 15/16 | - 11/16 | 0 |
| | COMPOSITE DEAD LOAD | 0 | - 1/8 | - 3/16 | - 1/8 | 0 | 0 | - 1/8 | - 3/8 | - 3/8 | - 1/2 | - 1/2 | - 7/16 | - 1/4 | - 1/4 | - 1/16 | 0 | - 1/16 | - 1/4 | - 5/16 | - 7/16 | - 1/2 | - 1/2 | - 5/16 | - 5/16 | - 1/8 | 0 | - 1/16 | - 1/16 | - 1/8 | - 3/16 | - 3/16 | 0 | |
| | TOTAL DEAD LOAD | 0 | - 3/4 | - 15/16 | - 5/8 | - 3/16 | - 1/16 | 0 | - 7/16 | -1 1/4 | -1 5/16 | -1 7/8 | -2 | -1 3/4 | -1 1/8 | -1 1/16 | - 5/16 | 0 | - 1/8 | - 5/8 | - 3/4 | -1 3/16 | -1 7/16 | -1 5/16 | - 7/8 | - 13/16 | - 1/4 | 0 | - 5/16 | - 1/2 | - 7/8 | -1 1/8 | - 7/8 | 0 |
| 2 | NON-COMPOSITE SLAB | 0 | - 9/16 | - 11/16 | - 1/2 | - 1/4 | - 1/8 | 0 | - 1/4 | - 3/4 | - 7/8 | -1 3/16 | -1 3/8 | -1 3/16 | - 7/8 | - 3/4 | - 1/4 | 0 | 0 | - 5/16 | - 3/8 | - 11/16 | - 13/16 | - 3/4 | - 1/2 | - 7/16 | - 1/8 | 0 | - 1/4 | - 3/8 | - 5/8 | - 7/8 | - 5/8 | 0 |
| | COMPOSITE DEAD LOAD | 0 | - 1/8 | - 1/8 | - 1/8 | - 1/16 | 0 | 0 | - 1/8 | - 5/16 | - 5/16 | - 7/16 | - 1/2 | - 3/8 | - 1/4 | - 1/4 | - 1/16 | 0 | - 1/16 | - 1/4 | - 1/4 | - 3/8 | - 1/2 | - 7/16 | - 5/16 | - 5/16 | - 1/8 | 0 | 0 | - 1/16 | - 1/8 | - 3/16 | - 1/8 | 0 |
| | TOTAL DEAD LOAD | 0 | - 11/16 | - 13/16 | - 5/8 | - 5/16 | - 1/8 | 0 | - 3/8 | -1 1/16 | -1 3/16 | -1 5/8 | -1 7/8 | -1 9/16 | -1 1/8 | -1 | - 5/16 | 0 | - 1/16 | - 9/16 | - 5/8 | -1 1/16 | -1 5/16 | -1 3/16 | - 13/16 | - 3/4 | - 1/4 | 0 | - 1/4 | - 7/16 | - 3/4 | -1 1/16 | - 3/4 | 0 |
| 3 | NON-COMPOSITE SLAB | 0 | - 9/16 | - 11/16 | - 1/2 | - 1/4 | - 1/8 | 0 | - 3/16 | - 11/16 | - 3/4 | -1 1/8 | -1 5/16 | -1 3/16 | - 7/8 | - 3/4 | - 1/4 | 0 | 0 | - 1/4 | - 5/16 | - 5/8 | - 13/16 | - 3/4 | - 1/2 | - 7/16 | - 1/8 | 0 | - 3/16 | - 3/8 | - 5/8 | - 13/16 | - 5/8 | 0 |
| | COMPOSITE DEAD LOAD | 0 | - 1/8 | - 3/16 | - 1/8 | - 1/16 | 0 | 0 | - 1/8 | - 5/16 | - 5/16 | - 7/16 | - 7/16 | - 3/8 | - 1/4 | - 1/4 | - 1/16 | 0 | - 1/16 | - 1/4 | - 1/4 | - 3/8 | - 7/16 | - 7/16 | - 5/16 | - 5/16 | - 1/8 | 0 | 0 | - 1/16 | - 1/8 | - 3/16 | - 1/8 | 0 |
| | TOTAL DEAD LOAD | 0 | - 11/16 | - 7/8 | - 5/8 | - 5/16 | - 1/8 | 0 | - 5/16 | -1 | -1 1/16 | -1 9/16 | -1 3/4 | -1 9/16 | -1 1/8 | -1 | - 5/16 | 0 | - 1/16 | - 1/2 | - 9/16 | -1 | -1 1/4 | -1 3/16 | - 13/16 | - 3/4 | - 1/4 | 0 | - 3/16 | - 7/16 | - 3/4 | -1 | - 3/4 | 0 |
| 4 | NON-COMPOSITE SLAB | 0 | - 9/16 | - 3/4 | - 9/16 | - 5/16 | - 3/16 | 0 | - 3/16 | - 5/8 | - 11/16 | -1 1/16 | -1 1/4 | -1 3/16 | - 7/8 | - 3/4 | - 5/16 | 0 | 0 | - 1/4 | - 5/16 | - 5/8 | - 13/16 | - 3/4 | - 9/16 | - 1/2 | - 1/8 | 0 | - 3/16 | - 5/16 | - 5/8 | - 13/16 | - 5/8 | 0 |
| | COMPOSITE DEAD LOAD | 0 | - 1/8 | - 3/16 | - 1/8 | - 1/16 | 0 | 0 | - 1/8 | - 5/16 | - 5/16 | - 7/16 | - 1/2 | - 3/8 | - 1/4 | - 1/4 | - 1/16 | 0 | - 1/16 | - 1/4 | - 1/4 | - 3/8 | - 1/2 | - 7/16 | - 5/16 | - 5/16 | - 1/8 | 0 | 0 | - 1/16 | - 1/8 | - 1/8 | - 1/8 | 0 |
| | TOTAL DEAD LOAD | 0 | - 11/16 | - 15/16 | - 11/16 | - 3/8 | - 3/16 | 0 | - 5/16 | - 15/16 | -1 | -1 1/2 | -1 3/4 | -1 9/16 | -1 1/8 | -1 | - 3/8 | 0 | - 1/16 | - 1/2 | - 9/16 | -1 | -1 5/16 | -1 3/16 | - 7/8 | - 13/16 | - 1/4 | 0 | - 3/16 | - 3/8 | - 3/4 | - 15/16 | - 3/4 | 0 |
| 5 | NON-COMPOSITE SLAB | 0 | - 11/16 | - 7/8 | - 5/8 | - 3/8 | - 3/16 | 0 | - 1/8 | - 5/8 | - 11/16 | -1 1/16 | -1 5/16 | -1 3/16 | - 7/8 | - 13/16 | - 5/16 | 0 | 1/16 | - 5/16 | - 3/8 | - 11/16 | - 7/8 | - 13/16 | - 5/8 | - 9/16 | - 3/16 | 0 | - 3/16 | - 3/8 | - 5/8 | - 7/8 | - 11/16 | 0 |
| | COMPOSITE DEAD LOAD | 0 | - 3/16 | - 3/16 | - 1/8 | - 1/16 | - 1/16 | 0 | - 1/8 | - 5/16 | - 5/16 | - 1/2 | - 1/2 | - 7/16 | - 5/16 | - 1/4 | - 1/16 | 0 | - 1/16 | - 1/4 | - 1/4 | - 7/16 | - 1/2 | - 1/2 | - 3/8 | - 3/8 | - 1/8 | 0 | 0 | - 1/16 | - 1/8 | - 3/16 | - 1/8 | 0 |
| | TOTAL DEAD LOAD | 0 | - 7/8 | -1 1/16 | - 3/4 | - 7/16 | - 1/4 | 0 | - 1/4 | - 15/16 | -1 | -1 9/16 | -1 13/16 | -1 5/8 | -1 3/16 | -1 1/16 | - 3/8 | 0 | 0 | - 9/16 | - 5/8 | -1 1/8 | -1 3/8 | -1 5/16 | -1 | - 15/16 | - 5/16 | 0 | - 3/16 | - 7/16 | - 3/4 | -1 1/16 | - 13/16 | 0 |

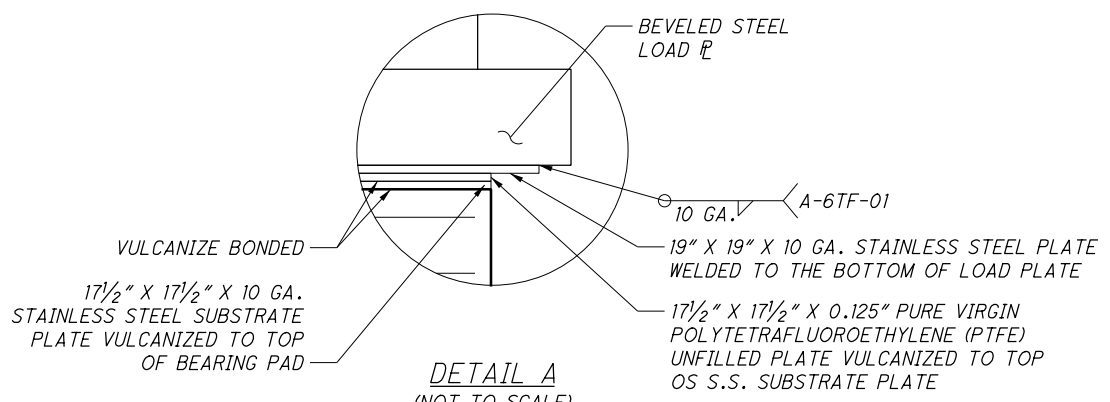
PARSONS
 100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235
 DATE: 3/17
 REVIEWED: RWB
 STRUCTURE FILE NUMBER: 4900243
 DRAWN: GF
 CHECKED: TBS
 DESIGNED: TMB
 TBS
DEFLECTION TABLES
 BRIDGE NO. MAD-SR29-1061
 OVER I.R. 70
MAD-29-10.61
 PID No. 104867
 17/30
 63
 76



SECTION A-A
LAMINATED ELASTOMERIC EXPANSION BEARING AT PIERS



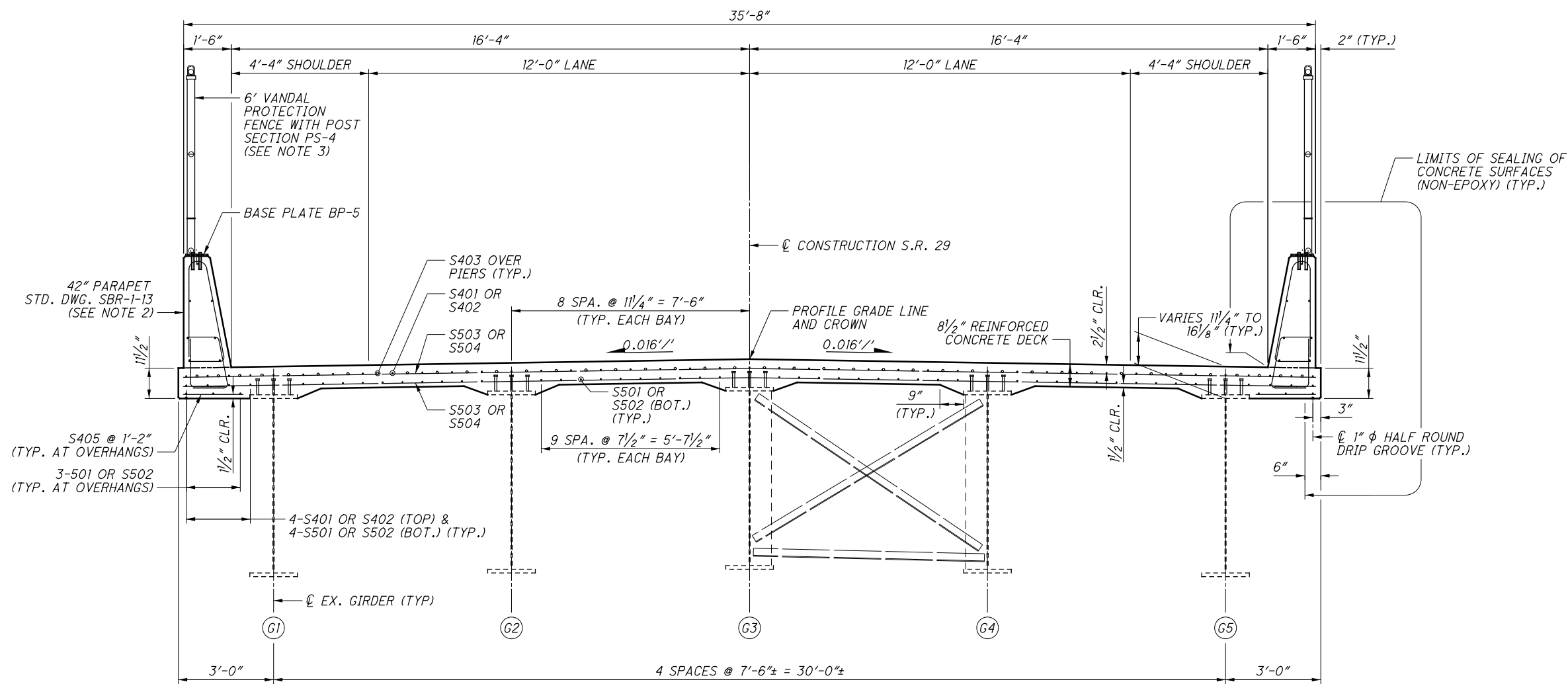
SECTION B-B
LAMINATED ELASTOMERIC EXPANSION BEARING WITH SLIDING PLATES AT ABUTMENTS



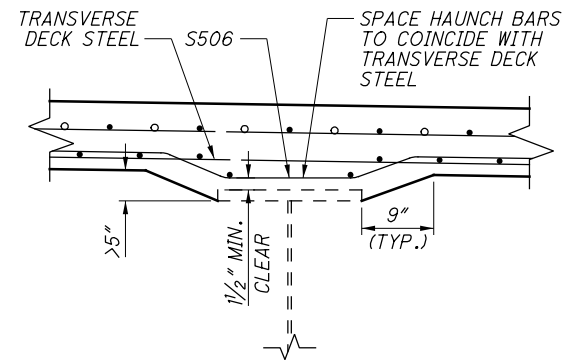
- NOTES:**
- ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 60 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.
 - THE STEEL LOAD PLATES SHALL BE ASTM A709 GRADE 50 STEEL. PAINT EXPOSED SURFACES OF LOAD PLATES TO MATCH GIRDERS.
 - THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
 - ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.
 - TOTAL DESIGN LOAD FOR BEARINGS EQUALS THE SUM OF THE DEAD LOADS AND LIVE LOADS TABULATED IN THE BEARING TABLE.
 - THE UNIT PRICE FOR BEARINGS SHALL INCLUDE ALL MATERIALS, LABOR, TESTING, HP SHAPES, SLIDING PLATES AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS WITH AND WITHOUT SLIDING PLATES. PAYMENT SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR THE APPROPRIATE ITEM 516.
 - LOADS SHOWN ARE SERVICE LOADS WITH NO LOAD FACTOR OR IMPACT FACTORS INCLUDED.
 - PTFE SURFACE (FORWARD AND REAR ABUTMENT): FINISHED UNFILLED DIMPLED LUBRICATED PTFE SHEETS SHALL BE MADE FROM 100 PERCENT VIRGIN PTFE RESIN AND SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 TENSILE STRENGTH ASTM D4894 - 2800 PSI (MINIMUM)
 ELONGATION ASTM D4894 - 200 PERCENT (MINIMUM)
 SPECIFIC GRAVITY ASTM D792 - 2.13 (MINIMUM)
 MELTING POINT ASTM D4894 - 623°F (±2°F)
 THE SHEET SHALL BE RECESSED AND EPOXY BONDED TO THE STEEL SUBSTRATE. THE SHOULDERS OF THE RECESS SHALL BE SHARP AND SQUARE AND THE DEPTH SHALL BE EQUAL TO ONE-HALF OF THE PTFE THICKNESS. PTFE SHEET SHALL BE COMMERCIALY ETCHED ON IT'S BONDING SIDE. THE BONDING SURFACE OF THE SUBSTRATE SHALL BE CLEANED OF RUST, SCALE, OIL, AND GREASE BY THE BLAST CLEANING AND WIPED WITH A CLEANING SOLVENT. BLAST CLEANING SHALL BE PERFORMED WITHIN A MAXIMUM OF FOUR HOURS PRIOR TO BONDING.
 THE ADHESIVE MATERIAL, THE BONDING PROCEDURES TO BE USED, AND SURFACE SHALL CONFORM TO THE REQUIREMENTS OF FEDERAL SPECIFICATION MMM-A-134 AND THE MANUFACTURER'S RECOMMENDATIONS. THE ADHESION BETWEEN THE PTFE AND THE STEEL SUBSTRATE PLATE SHALL BE TESTED IN ACCORDANCE WITH ASTM D429, METHOD B. THE MINIMUM PEEL STRENGTH SHALL BE 25 POUNDS PER INCH.
 AFTER COMPLETION OF THE BONDING OPERATION, THE PTFE SHALL BE FREE OF BUBBLES.
 - STAINLESS STEEL PLATES (FORWARD AND REAR ABUTMENTS): THE STAINLESS STEEL SURFACE SHALL CONFORM TO ASTM A167 OR A240 TYPE 304 AND SHALL HAVE A #8 MINIMUM FINISH OR BETTER.
 STAINLESS STEEL SHALL BE ATTACHED TO THE LOAD PLATE BY A CONTINUOUS WELD AROUND ITS ENTIRE PERIMETER. WELDS SHALL CONFORM TO THE AWS REQUIREMENTS FOR STAINLESS STEEL. THE WELDER SHALL BE PRE-QUALIFIED BY TEST WELDS PREPARED, WELDED, AND TESTED IN ACCORDANCE WITH 6.7 OF ANSI/AWS D1.3, STRUCTURAL WELDING CODE - SHEET STEEL. AFTER WELDING, THE SHEET STEEL SHALL BE FLAT, FREE FROM WRINKLES, AND IN CONTINUOUS CONTACT WITH ITS BACKING PLATE. NO ROUGHNESS FROM THE WELD PROTRUDING ABOVE THE SURFACE OF THE STAINLESS STEEL SHALL BE PERMITTED.
 - LUBRICANT (FORWARD AND REAR ABUTMENT): LUBRICANT SHALL BE SILICONE GREASE WHICH SATISFIES MILITARY SPECIFICATION MIL-S-8660.
 INSTALLATION OF SLIDING BEARINGS (FORWARD AND REAR ABUTMENT): A REPRESENTATIVE SHALL BE PRESENT ON SITE FOR A SUFFICIENT PERIOD OF TIME TO ENSURE THAT THE CONTRACTOR IS INSTALLING THE BEARINGS PROPERLY.

| ELASTOMERIC BEARING DATA | | | | | | | | | | | | | STEEL LOAD PLATE | | HP14X73 | FILLET WELD | T | | | | |
|--------------------------|--------------|------------|-----------|-----------|------------|------|------|-------|-------|--------------|--------------|------------------------------|------------------|----|---------|-------------|-------|-------|--------|--------|--------|
| BEARING LOCATION | BEARING TYPE | NO. REQ'D. | DEAD LOAD | LIVE LOAD | TOTAL LOAD | Le | We | Tpi | Tpe | NO. OF Tpi's | NO. OF Tpe's | NUMBER OF INTERNAL LAMINATES | Te | Lt | Wt | t | t1 | t2 | tHP | | |
| REAR ABUTMENT | EXP | 5 | 111.9 | 69.1 | 181.0 | 17.5 | 17.5 | 0.875 | 0.438 | 5 | 2 | 6 | 5.698 | 23 | 20 | 1.626 | 1.500 | 1.751 | 3.033 | 0.3125 | 12.250 |
| PIER 1 | EXP | 5 | 303.3 | 128.1 | 431.4 | 22 | 26 | 0.875 | 0.438 | 3 | 2 | 4 | 3.799 | 23 | 27 | 1.576 | 1.500 | 1.652 | 15.375 | 0.3125 | 22.250 |
| PIER 2 | EXP | 5 | 345.8 | 133.4 | 479.2 | 22 | 26 | 0.875 | 0.438 | 3 | 2 | 4 | 3.799 | 23 | 27 | 1.500 | 1.500 | 1.500 | 15.451 | 0.3125 | 22.250 |
| PIER 3 | EXP | 5 | 294.3 | 199.3 | 493.6 | 22 | 26 | 0.875 | 0.438 | 3 | 2 | 4 | 3.799 | 23 | 27 | 1.576 | 1.652 | 1.500 | 15.375 | 0.3125 | 22.250 |
| FORWARD ABUTMENT | EXP | 5 | 111.9 | 69.1 | 181.0 | 17.5 | 17.5 | 0.875 | 0.438 | 5 | 2 | 6 | 5.698 | 23 | 20 | 1.626 | 1.751 | 1.500 | 3.033 | 0.3125 | 12.250 |

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TRANSVERSE SECTION



DEEP HAUNCH DETAIL

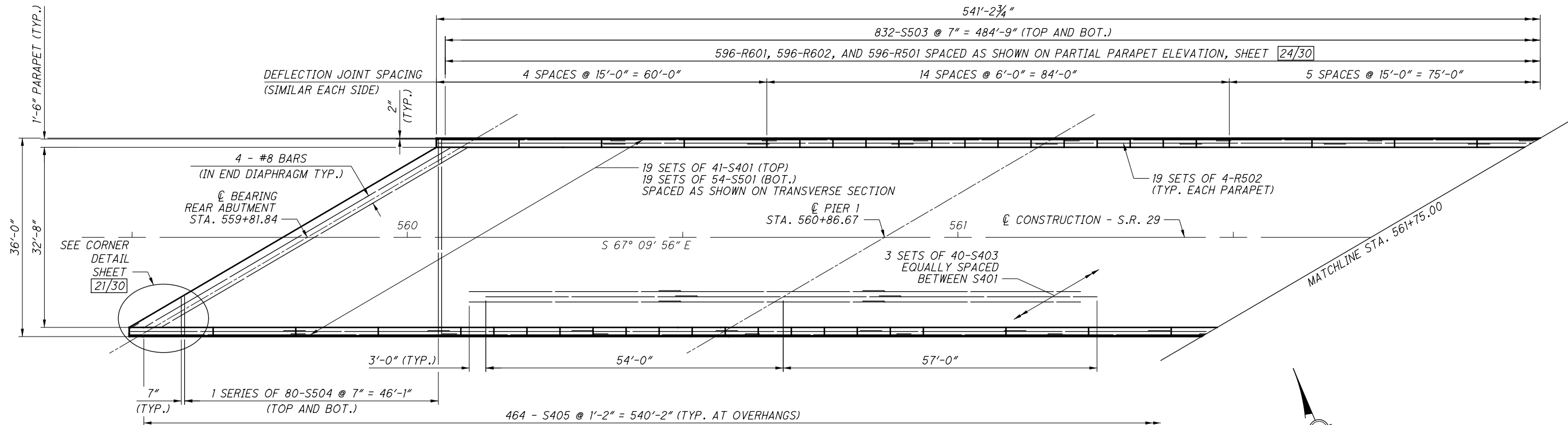
FOR LOCATION OF DEEP HAUNCHES, SEE DEEP HAUNCH TABLE, SHEET [21/30].

NOTES

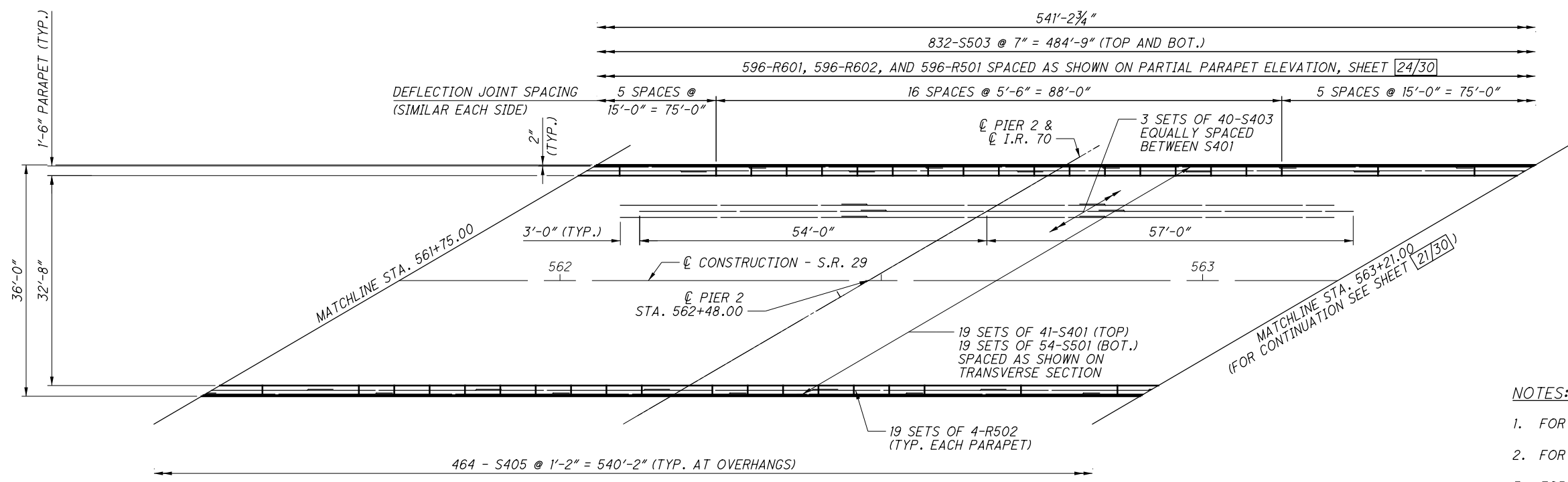
1. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A VARIABLE HAUNCH THICKNESS OF 2 TO 6 1/4" INCHES AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM/GIRDER FLANGE OF 9 INCHES. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM/GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.23.
2. FOR ADDITIONAL PARAPET DETAILS, SEE STD. DWG. SBR-1-13 AND SHEET [24/30].
3. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE STD. DWG. VPF-1-90.
4. FOR NEW END CROSSFRAME DETAILS, SEE STD. DWG. GSD-1-96 AND SHEET [15/30].

| | |
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| DRAWN JRE | REVISED |
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| STRUCTURE FILE NUMBER 4900243 | |
| TRANSVERSE SECTION BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 | |
| MAD-29-10.61 PID No. 104867 | |
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PARTIAL DECK PLAN



PARTIAL DECK PLAN

NOTES:

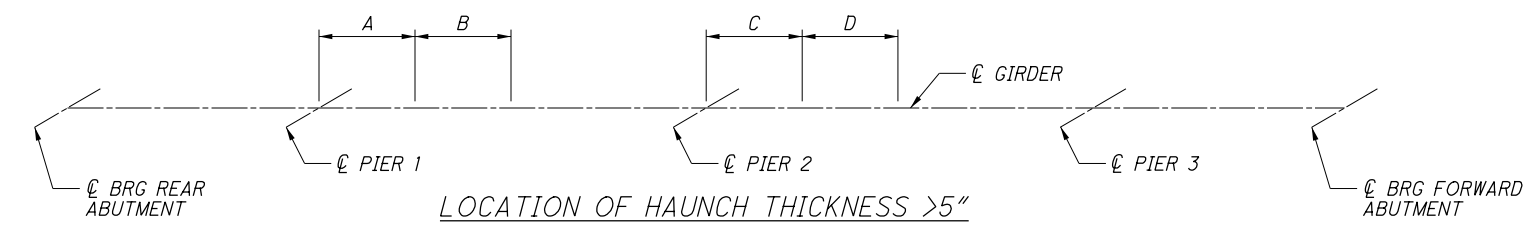
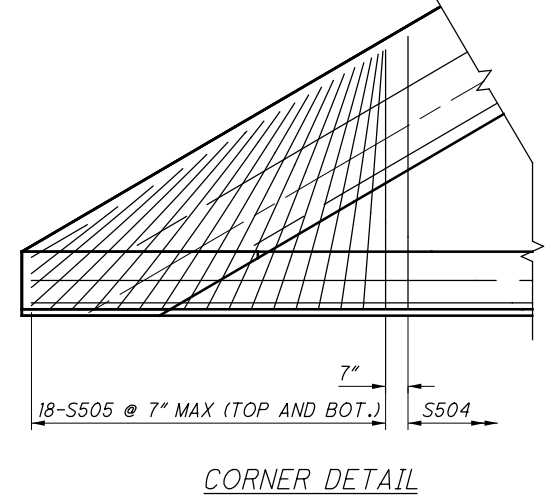
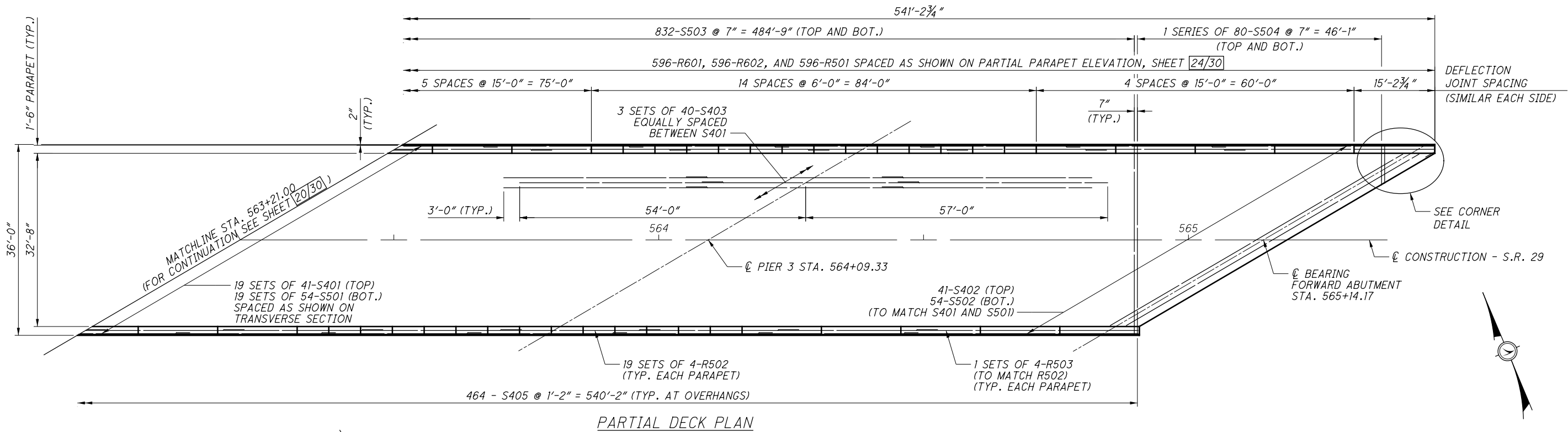
- FOR GENERAL NOTES SEE SHEET [3/30].
- FOR REINFORCING STEEL LIST SEE SHEET [30/30].
- FOR SCREED, TOP OF HAUNCH & FINAL DECK SURFACE ELEVATIONS SEE SHEETS [26/30], [27/30] & [28/30].
- FOR TRANSVERSE SECTION SEE SHEET [19/30].
- FOR PARAPET TRANSITION NOTES AND DETAILS INCLUDING REINFORCING STEEL, SEE ODOT STANDARD DRAWING SBR-1-13 & SHEETS [12/30] & [13/30].
- THE ANCHORS FOR THE VPF SHALL BE CAST IN PLACE OR CORE DRILLED TO ENSURE THE INTEGRITY OF THE PARAPETS.

| REQUIRED MIN. LAP LENGTHS ◇ | |
|-----------------------------|-------|
| #4 BARS | 2'-7" |
| #5 BAR | 3'-6" |
| #6 BAR | 4'-3" |

◇ UNLESS OTHERWISE NOTED.

| | |
|---|---|
| | DATE 3/17 REVIEWED RWB STRUCTURE FILE NUMBER 4900243 |
| DRAWN JRE DESIGNED JRE CHECKED JLW | DECK PLAN - 1 BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 |
| MAD-29-10.61 PID No. 104867 | 20/30 66 76 |

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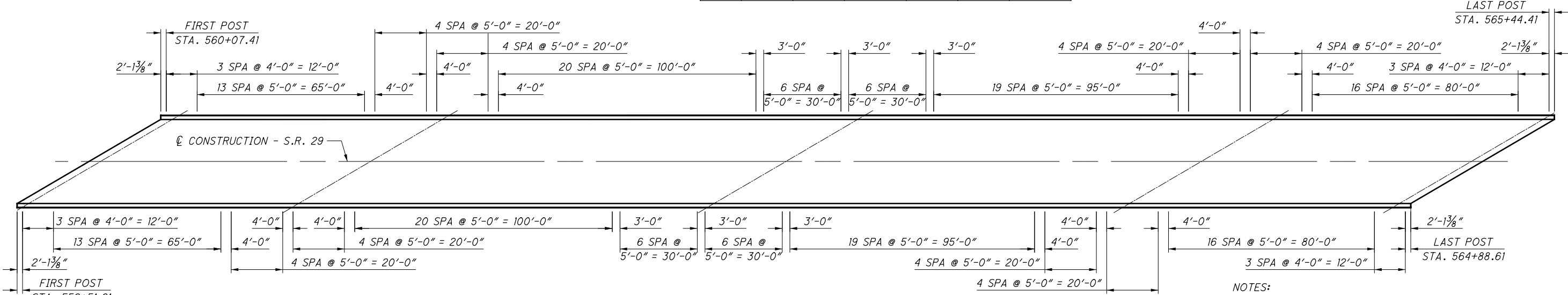
DEEP HAUNCH TABLE

| GIRDER | DIMENSION | | NO. S506 BARS | DIMENSION | | NO. S506 BARS |
|--------|-----------|--------|---------------|-----------|---------|---------------|
| | A | B | | C | D | |
| G1 | 75'-0" | 87'-0" | 149 | 0" | 117'-0" | 201 |
| G2 | N/A | N/A | N/A | 14'-0" | 120'-0" | 206 |
| G3 | N/A | N/A | N/A | 23'-0" | 94'-0" | 161 |
| G4 | N/A | N/A | N/A | 24'-0" | 89'-0" | 153 |
| G5 | 78'-0" | 43'-0" | 74 | 9'-0" | 109'-0" | 187 |

REQUIRED MIN. LAP LENGTHS

| | |
|---------|-------|
| #4 BARS | 2'-7" |
| #5 BAR | 3'-6" |
| #6 BAR | 4'-3" |

◇ UNLESS OTHERWISE NOTED.



NOTES:

1. FOR REMAINDER OF DECK PLAN AND ADDITIONAL NOTES, SEE SHEET 20/30.

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DECK PLAN - 2
BRIDGE NO. MAD-SR29-1061
OVER I.R. 70

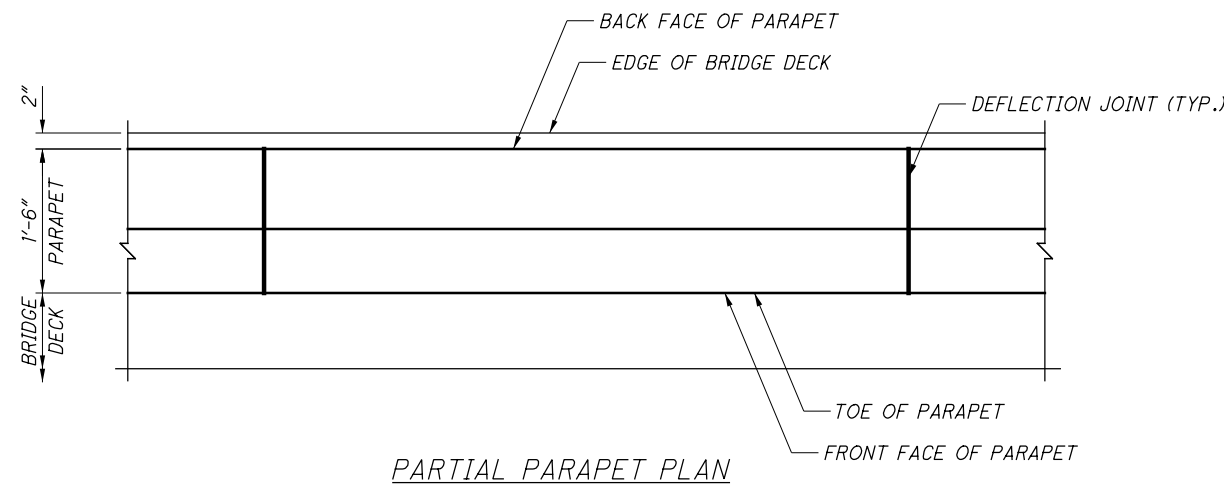
MAD-29-10.61
PID No. 104867

21/30

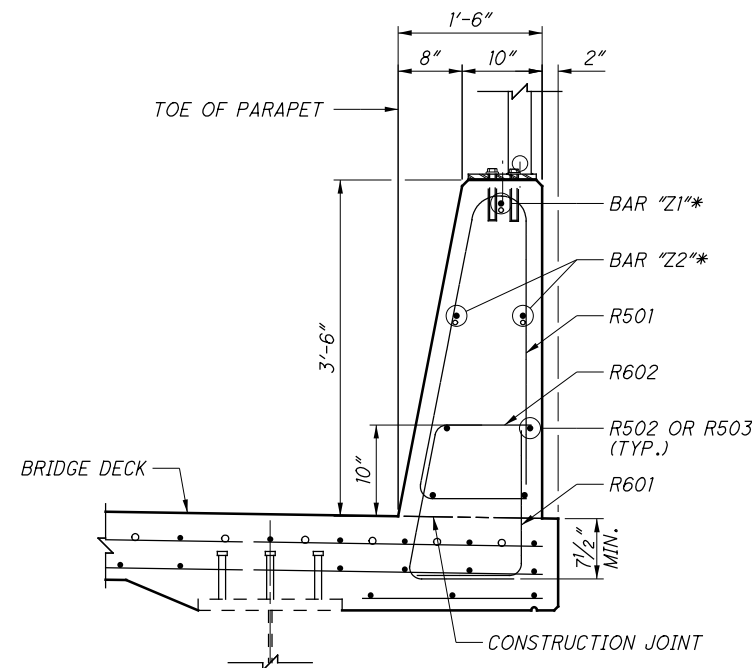
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76

| | | | |
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| DESIGNED | JRE | CHECKED | JLW |
| DRAWN | JRE | REVISED | |
| REVIEWED | RWB | STRUCTURE FILE NUMBER | 4900243 |
| DATE | 3/17 | | |

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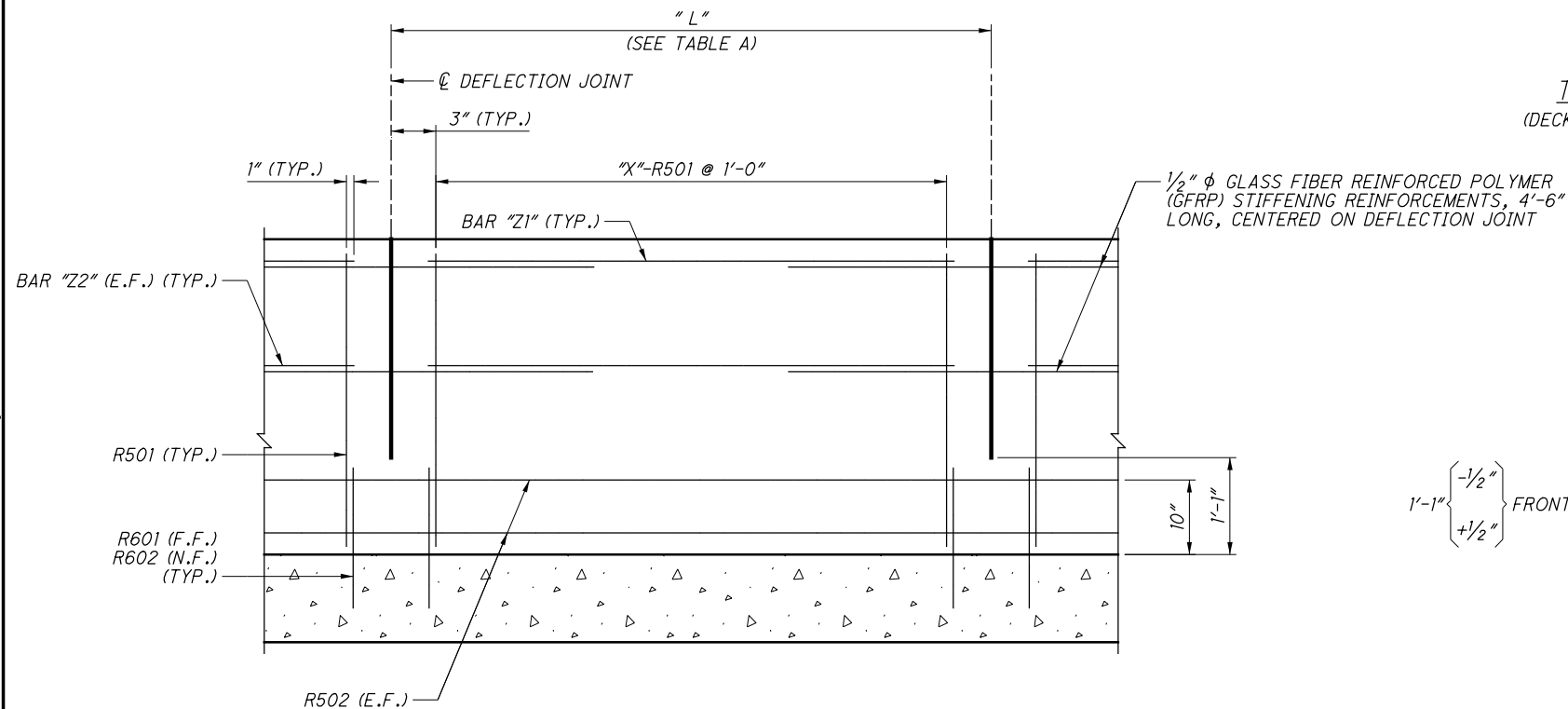


PARTIAL PARAPET PLAN

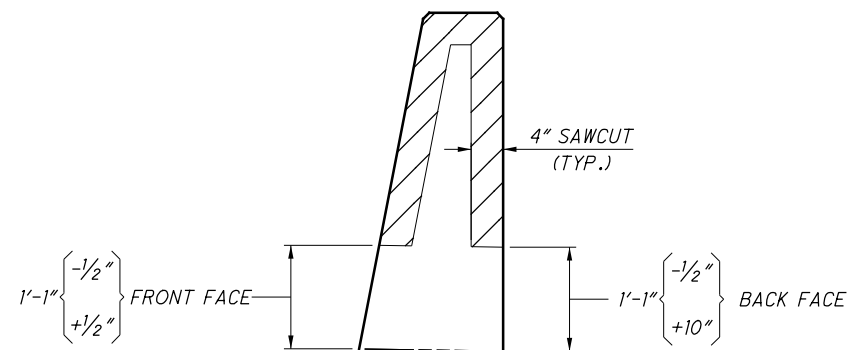


- * LEGEND:
 ● - EPOXY COATED REINFORCING
 ○ - GLASS FIBER REINFORCED POLYMER (GFRP) STIFFENING REINFORCING

TYPICAL PARAPET SECTION
 (DECK REINFORCING NOT SHOWN FOR CLARITY)



PARTIAL PARAPET ELEVATION
 (DECK REINFORCING AND VANDAL PROTECTION FENCE NOT SHOWN FOR CLARITY)



TYPICAL SAWCUT SECTION

DEFLECTION JOINT NOTES:

SAWCUT 1/4" DEEP DEFLECTION JOINTS ALONG THE PERIMETER OF THE PARAPET WHEN THE CONCRETE IS STILL GREEN OR AS SOON AS THE SAW CAN BE OPERATED WITHOUT DAMAGING THE CONCRETE.

AFTER THE CONCRETE CURING PERIOD SPECIFIED IN CMS 511.14 HAS BEEN REACHED, PERFORM 4" SAWCUT THROUGH THE GFRP AS SHOWN IN THE TYPICAL SAWCUT SECTION.

THE CONTRACTOR HAS THE OPTION TO PERFORM A FULL DEPTH SAWCUT. HOWEVER, THE SAWCUT SHALL NOT BE LESS THAN 1'-0 1/2" FROM THE TOP OF THE CONCRETE DECK.

USE AN EDGE GUIDE, FENCE, OR JIG TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES OF THE PARAPET. THE JOINT WIDTH SHALL BE THE WIDTH OF THE SAW BLADE, A NOMINAL WIDTH OF 1/4".

SEAL THE PERIMETER OF THE DEFLECTION JOINTS TO A MINIMUM DEPTH OF ONE INCH WITH A POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S. LEAVE THE BOTTOM 1/2 INCH OF BOTH THE INSIDE AND OUTSIDE FACES OF THE PARAPET UNSEALED TO ALLOW ANY WATER WHICH MAY ENTER THE JOINT TO ESCAPE.

AT EACH DEFLECTION JOINT LOCATION, USE GFRP TO MAINTAIN THE RIGIDITY OF THE CAGE ACROSS THE PROPOSED JOINTS AT THOSE LONGITUDINAL BARS AS SHOWN IN THE PARTIAL PARAPET ELEVATION AND TYPICAL PARAPET SECTION VIEWS ON THIS SHEET. OTHER NON-FERROUS REINFORCEMENT MAY BE PROPOSED FOR USE, SUBJECT TO APPROVAL BY THE ENGINEER.

FOR TRANSITION SECTION, PLACE A DEFLECTION JOINT AT THE BEGINNING OF THE 14'-0" TRANSITION. DEFLECTION JOINTS ARE NOT REQUIRED WITHIN THE 14'-0" TRANSITION SECTION. SEE ABUTMENT SHEETS 12/30 AND 13/30.

LEGEND

- E.F. - EACH FACE
 N.F. - NEAR FACE
 F.F. - FAR FACE

NOTES

- FOR DECK PLAN AND PARAPET PLAN INCLUDING DEFLECTION JOINT LOCATIONS, SEE SHEETS 20/30 AND 21/30.
- FOR TRANSVERSE SECTION, SEE SHEET 19/30.
- FOR REINFORCING STEEL LIST, SEE SHEET 30/30.
- FOR ADDITIONAL PARAPET DETAILS, SEE STD. DWG. SBR-1-13.
- FOR VANDAL PROTECTION FENCE POST LOCATIONS, SEE SHEET 21/30. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE STD. DWG. VPF-1-90.

| TABLE A | | | | |
|---------------|------------|-----|------|------|
| NO. OF PANELS | "L" | "X" | "Z1" | "Z2" |
| 32 | 5'-6" | 6 | R603 | R504 |
| 56 | 6'-0" | 7 | R604 | R505 |
| 2 | 15'-2 3/4" | 16 | R605 | R506 |
| 36 | 15'-0" | 16 | R606 | R507 |

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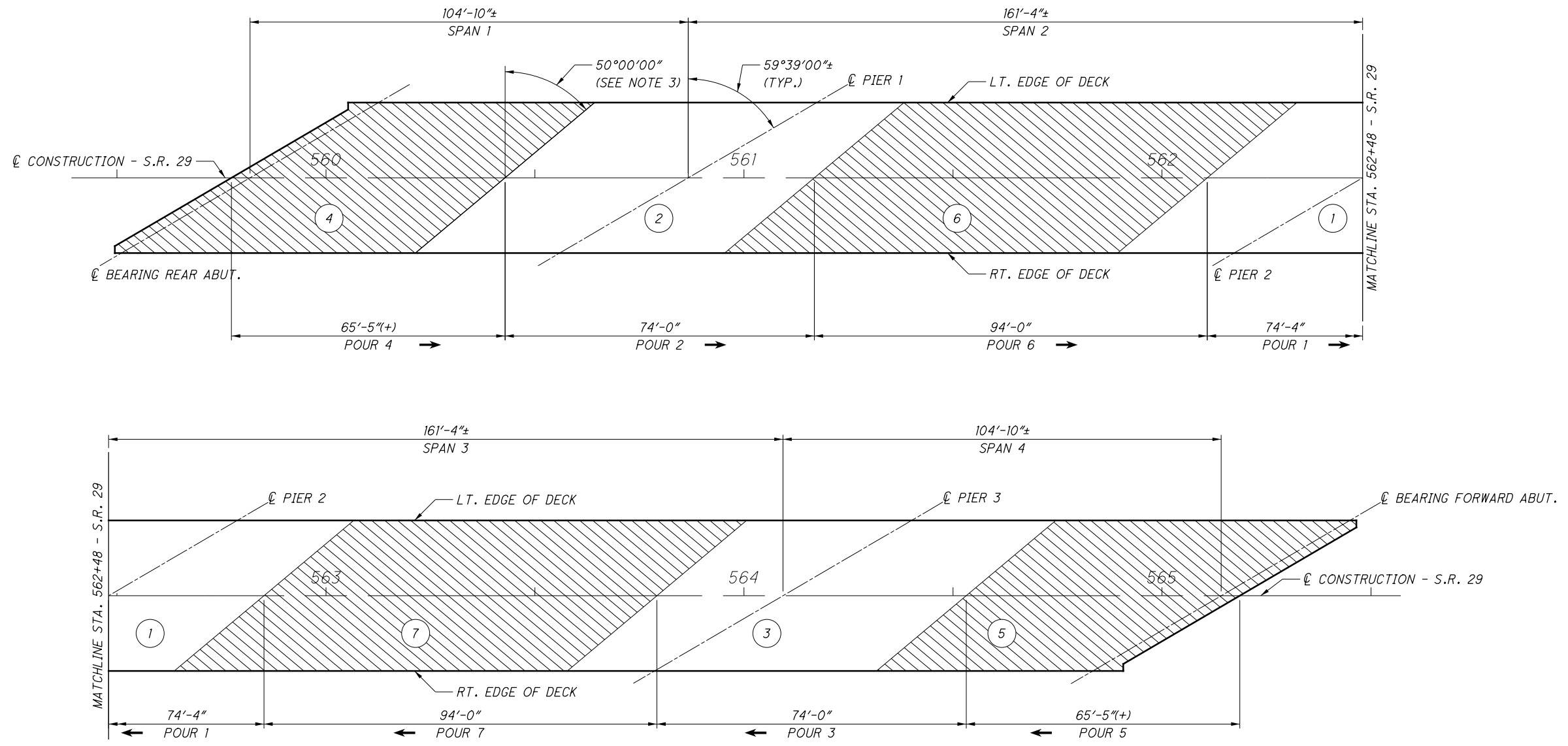
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DRAWN: JRE
 REVISED:

PARAPET DETAILS
 BRIDGE NO. MAD-SR29-1061
 OVER I.R. 70

MAD-29-10.61
 PID No. 104867

24/30
 70
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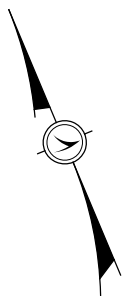
DECK POUR SEQUENCE

LEGEND:

- ① POUR SEQUENCE NUMBER
- ➔ DIRECTION OF POUR

NOTES:

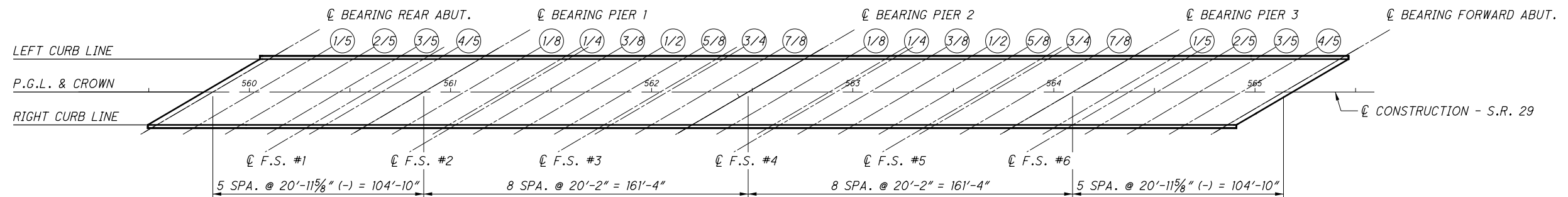
1. POUR LIMITS ARE BASED ON DL CONTRAFLEXURE POINTS/SPLICE LOCATIONS.
2. THIS IS A SUGGESTED SEQUENCE FOR POURING THE DECK CONCRETE, SHOULD THE CONTRACTOR PROPOSE TO USE A DIFFERENT SEQUENCE, THE SUBMITTAL SHALL BE MADE IN ACCORDANCE WITH CMS ITEMS 501 AND 511.
3. MAXIMUM ANGLE OF FINISHING MACHINE SHALL BE 50°00'00" PER CMS ITEM 511.16.
4. FOR TRANSVERSE SECTION DETAILS SEE SHEET [19/30].
5. FOR DECK PLANS, SEE SHEETS [20/30] AND [21/30].
6. FOR SCREED TABLES, SEE SHEET [26/30].



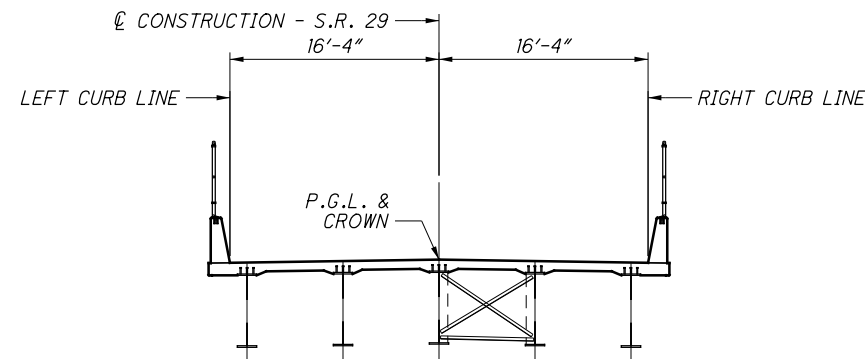
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|--|--|----------------------------------|-------------------------|----------------------|--|
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| | <p>DECK POUR SEQUENCE BRIDGE NO. MAD-SR29-1061 OVER I.R. 70</p> | | | | |
| <p>MAD-29-10.61 PID No. 104867</p> | <p>25/30</p> | | | | <p>71 76</p> |

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LEGEND:
F.S. - FIELD SPLICE



SCREED LOCATION PLAN



SCREED LOCATION SECTION

NOTES:

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

| SCREED ELEVATIONS | | | | | | | | | | | | | | | | | | |
|-------------------|-----------|--------------------|---------------|-----------|-----------|-----------|-----------|----------------|----------------|---------------|-----------|-----------|-----------|-----------|-------------------|----------------|-----------|-----------|
| POINT | | CL BRG. REAR ABUT. | SPAN NUMBER 1 | | | | | CL BRG. PIER 1 | SPAN NUMBER 2 | | | | | | | CL BRG. PIER 2 | | |
| | | | 1/5 POINT | 2/5 POINT | 3/5 POINT | F.S. #1 | 4/5 POINT | | 1/8 POINT | 1/4 POINT | F.S. #2 | 3/8 POINT | 1/2 POINT | 5/8 POINT | F.S. #3 | | 3/4 POINT | 7/8 POINT |
| LEFT CURB | STATION | 560+09.74 | 560+30.70 | 560+51.67 | 560+72.64 | 560+86.57 | 560+93.60 | 561+14.57 | 561+34.74 | 561+54.90 | 561+58.32 | 561+75.07 | 561+95.24 | 562+15.40 | 562+32.15 | 562+35.57 | 562+55.74 | 562+75.90 |
| | ELEVATION | 995.09 | 995.35 | 995.55 | 995.68 | 995.74 | 995.78 | 995.89 | 996.03 | 996.19 | 996.20 | 996.31 | 996.37 | 996.38 | 996.35 | 996.35 | 996.28 | 996.24 |
| P.G.L. & CROWN | STATION | 559+81.84 | 560+02.81 | 560+23.77 | 560+44.74 | 560+58.67 | 560+65.71 | 560+86.67 | 561+06.84 | 561+27.01 | 561+30.42 | 561+47.17 | 561+67.34 | 561+87.51 | 562+04.26 | 562+07.67 | 562+27.84 | 562+48.01 |
| | ELEVATION | 995.07 | 995.34 | 995.56 | 995.73 | 995.81 | 995.85 | 995.99 | 996.14 | 996.30 | 996.33 | 996.44 | 996.53 | 996.58 | 996.58 | 996.57 | 996.54 | 996.52 |
| RIGHT CURB | STATION | 559+53.95 | 559+74.91 | 559+95.88 | 560+16.85 | 560+30.78 | 560+37.81 | 560+58.78 | 560+78.95 | 560+99.11 | 561+02.53 | 561+19.28 | 561+39.45 | 561+59.61 | 561+76.36 | 561+79.78 | 561+99.95 | 562+20.11 |
| | ELEVATION | 994.49 | 994.80 | 995.04 | 995.23 | 995.33 | 995.37 | 995.53 | 995.69 | 995.88 | 995.91 | 996.05 | 996.17 | 996.24 | 996.25 | 996.25 | 996.24 | 996.24 |
| POINT | | SPAN NUMBER 3 | | | | | | | CL BRG. PIER 3 | SPAN NUMBER 4 | | | | | CL BRG. FWD ABUT. | | | |
| | | 1/8 POINT | 1/4 POINT | F.S. #4 | 3/8 POINT | 1/2 POINT | 5/8 POINT | F.S. #5 | | 3/4 POINT | 7/8 POINT | 1/5 POINT | F.S. #6 | 2/5 POINT | | 3/5 POINT | 4/5 POINT | |
| LEFT CURB | STATION | 562+96.07 | 563+16.24 | 563+19.65 | 563+36.40 | 563+56.57 | 563+76.74 | 563+93.49 | 563+96.90 | 564+17.07 | 564+37.24 | 564+58.20 | 564+65.24 | 564+79.17 | 565+00.14 | 565+21.10 | 565+42.07 | |
| | ELEVATION | 996.22 | 996.22 | 996.22 | 996.20 | 996.14 | 996.03 | 995.90 | 995.87 | 995.69 | 995.52 | 995.38 | 995.33 | 995.24 | 995.05 | 994.80 | 994.49 | |
| P.G.L. & CROWN | STATION | 562+68.17 | 562+88.34 | 562+91.76 | 563+08.51 | 563+28.67 | 563+48.84 | 563+65.59 | 563+69.01 | 563+89.17 | 564+09.34 | 564+30.31 | 564+37.34 | 564+51.27 | 564+72.24 | 564+93.21 | 565+14.17 | |
| | ELEVATION | 996.52 | 996.53 | 996.53 | 996.53 | 996.49 | 996.41 | 996.31 | 996.28 | 996.13 | 995.99 | 995.85 | 995.82 | 995.74 | 995.57 | 995.35 | 995.07 | |
| RIGHT CURB | STATION | 562+40.28 | 562+60.45 | 562+63.86 | 562+80.61 | 563+00.78 | 563+20.95 | 563+37.70 | 563+41.11 | 563+61.28 | 563+81.45 | 564+02.41 | 564+09.45 | 564+23.38 | 564+44.35 | 564+65.31 | 564+86.28 | |
| | ELEVATION | 996.26 | 996.30 | 996.31 | 996.33 | 996.32 | 996.26 | 996.18 | 996.16 | 996.02 | 995.89 | 995.79 | 995.76 | 995.69 | 995.56 | 995.36 | 995.09 | |

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DESIGNED: TMB
CHECKED: NJM

STRUCTURE FILE NUMBER: 4900243

SCREED ELEVATIONS
BRIDGE NO. MAD-SR29-1061
OVER I.R. 70

MAD-29-10.61
PID No. 104867

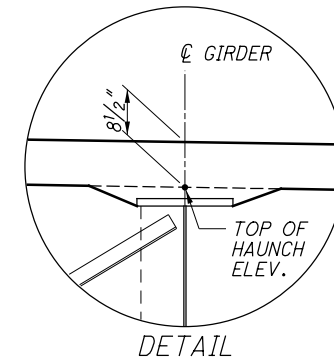
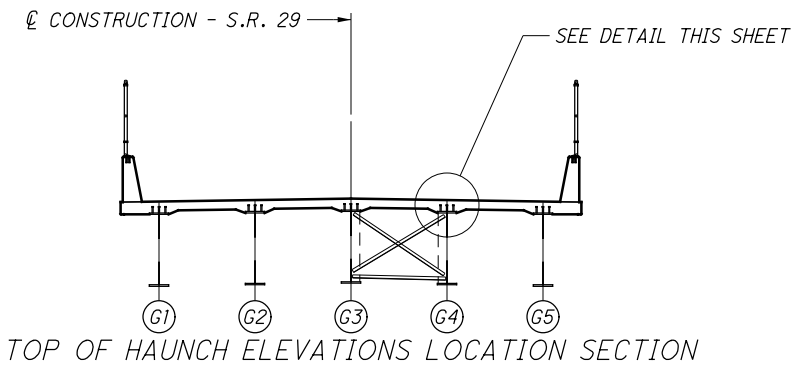
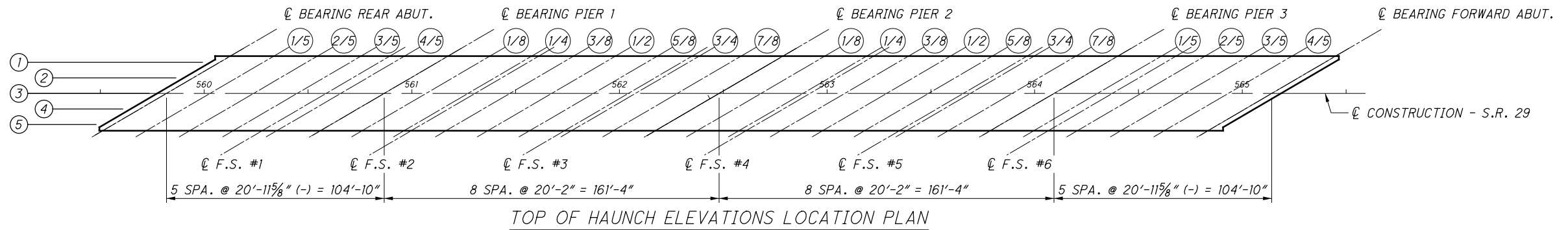
26/30

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76

pw:\VANVA01PWINT01\parsons.com:Ohio State Documents\MAD-70-08.62\05 - Design\CAD\104867_structures\MAD-29-1061\Sheets\029_1061C_SS003.dgn, Sheet - 4/30/2020 3:46:39 PM - p003821B

LEGEND:

- F.S. - FIELD SPLICE
- (X) - GIRDER LINE "X"



NOTES:

1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

| POINT | | TOP OF HAUNCH ELEVATIONS | | | | | | | | | | | | | | | | |
|---------------|-----------|--------------------------|---------------|-----------|-----------|-----------|-----------|----------------|---------------|----------------|---------------|-----------|-----------|----------------|-----------|-------------------|-----------|-----------|
| | | CL BRG. REAR ABUT. | SPAN NUMBER 1 | | | | | CL BRG. PIER 1 | SPAN NUMBER 2 | | | | | CL BRG. PIER 2 | | | | |
| | | 1/5 POINT | 2/5 POINT | 3/5 POINT | F.S. #1 | 4/5 POINT | 1/8 POINT | 1/4 POINT | F.S. #2 | 3/8 POINT | 1/2 POINT | 5/8 POINT | F.S. #3 | 3/4 POINT | 7/8 POINT | | | |
| GIRDER LINE 1 | STATION | 560+07.46 | 560+28.42 | 560+49.39 | 560+70.36 | 560+84.29 | 560+91.32 | 561+12.29 | 561+32.46 | 561+52.62 | 561+56.04 | 561+72.79 | 561+92.96 | 562+13.12 | 562+29.87 | 562+33.29 | 562+53.46 | 562+73.62 |
| | ELEVATION | 994.39 | 994.65 | 994.84 | 994.98 | 995.04 | 995.07 | 995.20 | 995.34 | 995.49 | 995.51 | 995.61 | 995.68 | 995.69 | 995.66 | 995.66 | 995.60 | 995.56 |
| GIRDER LINE 2 | STATION | 559+94.65 | 560+15.62 | 560+36.58 | 560+57.55 | 560+71.48 | 560+78.52 | 560+99.48 | 561+19.65 | 561+39.82 | 561+43.23 | 561+59.98 | 561+80.15 | 562+00.32 | 562+17.07 | 562+20.48 | 562+40.65 | 562+60.82 |
| | ELEVATION | 994.38 | 994.64 | 994.84 | 995.00 | 995.08 | 995.11 | 995.24 | 995.39 | 995.54 | 995.57 | 995.67 | 995.75 | 995.78 | 995.77 | 995.76 | 995.72 | 995.69 |
| GIRDER LINE 3 | STATION | 559+81.84 | 560+02.81 | 560+23.77 | 560+44.74 | 560+58.67 | 560+65.71 | 560+86.67 | 561+06.84 | 561+27.01 | 561+30.42 | 561+47.17 | 561+67.34 | 561+87.51 | 562+04.26 | 562+07.67 | 562+27.84 | 562+48.01 |
| | ELEVATION | 994.36 | 994.64 | 994.85 | 995.02 | 995.10 | 995.14 | 995.28 | 995.43 | 995.60 | 995.62 | 995.73 | 995.83 | 995.87 | 995.87 | 995.86 | 995.83 | 995.81 |
| GIRDER LINE 4 | STATION | 559+69.03 | 559+90.00 | 560+10.96 | 560+31.93 | 560+45.86 | 560+52.90 | 560+73.86 | 560+94.03 | 561+14.20 | 561+17.61 | 561+34.36 | 561+54.53 | 561+74.70 | 561+91.45 | 561+94.86 | 562+15.03 | 562+35.20 |
| | ELEVATION | 994.10 | 994.38 | 994.62 | 994.79 | 994.89 | 994.93 | 995.07 | 995.23 | 995.40 | 995.43 | 995.55 | 995.66 | 995.71 | 995.72 | 995.72 | 995.70 | 995.69 |
| GIRDER LINE 5 | STATION | 559+56.22 | 559+77.19 | 559+98.16 | 560+19.12 | 560+33.06 | 560+40.09 | 560+61.06 | 560+81.22 | 561+01.39 | 561+04.81 | 561+21.56 | 561+41.72 | 561+61.89 | 561+78.64 | 561+82.06 | 562+02.22 | 562+22.39 |
| | ELEVATION | 993.83 | 994.14 | 994.38 | 994.56 | 994.71 | 994.86 | 995.02 | 995.21 | 995.24 | 995.24 | 995.38 | 995.49 | 995.56 | 995.57 | 995.57 | 995.56 | 995.56 |
| POINT | | SPAN NUMBER 3 | | | | | | | | CL BRG. PIER 3 | SPAN NUMBER 4 | | | | | CL BRG. FWD ABUT. | | |
| | | 1/8 POINT | 1/4 POINT | F.S. #4 | 3/8 POINT | 1/2 POINT | 5/8 POINT | F.S. #5 | 3/4 POINT | 7/8 POINT | 1/5 POINT | F.S. #6 | 2/5 POINT | 3/5 POINT | 4/5 POINT | | | |
| GIRDER LINE 1 | STATION | 562+93.79 | 563+13.96 | 563+17.37 | 563+34.12 | 563+54.29 | 563+74.46 | 563+91.21 | 563+94.62 | 564+14.79 | 564+34.96 | 564+55.92 | 564+62.96 | 564+76.89 | 564+97.86 | 565+18.82 | 565+39.79 | |
| | ELEVATION | 995.54 | 995.54 | 995.54 | 995.52 | 995.46 | 995.35 | 995.23 | 995.20 | 995.02 | 994.86 | 994.71 | 994.67 | 994.57 | 994.39 | 994.14 | 993.83 | |
| GIRDER LINE 2 | STATION | 562+80.98 | 563+01.15 | 563+04.57 | 563+21.32 | 563+41.48 | 563+61.65 | 563+78.40 | 563+81.82 | 564+01.98 | 564+22.15 | 564+43.12 | 564+50.15 | 564+64.08 | 564+85.05 | 565+06.02 | 565+26.98 | |
| | ELEVATION | 995.68 | 995.68 | 995.68 | 995.67 | 995.62 | 995.53 | 995.41 | 995.39 | 995.23 | 995.07 | 994.93 | 994.89 | 994.80 | 994.63 | 994.39 | 994.10 | |
| GIRDER LINE 3 | STATION | 562+68.17 | 562+88.34 | 562+91.76 | 563+08.51 | 563+28.67 | 563+48.84 | 563+65.59 | 563+69.01 | 563+89.17 | 564+09.34 | 564+30.31 | 564+37.34 | 564+51.27 | 564+72.24 | 564+93.21 | 565+14.17 | |
| | ELEVATION | 995.81 | 995.82 | 995.82 | 995.82 | 995.78 | 995.70 | 995.60 | 995.58 | 995.42 | 995.28 | 995.15 | 995.11 | 995.03 | 994.86 | 994.64 | 994.36 | |
| GIRDER LINE 4 | STATION | 562+55.36 | 562+75.53 | 562+78.95 | 562+95.70 | 563+15.86 | 563+36.03 | 563+52.78 | 563+56.20 | 563+76.36 | 563+96.53 | 564+17.50 | 564+24.53 | 564+38.46 | 564+59.43 | 564+80.40 | 565+01.36 | |
| | ELEVATION | 995.70 | 995.72 | 995.72 | 995.73 | 995.71 | 995.63 | 995.54 | 995.52 | 995.38 | 995.24 | 995.12 | 995.08 | 995.01 | 994.85 | 994.65 | 994.38 | |
| GIRDER LINE 5 | STATION | 562+42.56 | 562+62.72 | 562+66.14 | 562+82.89 | 563+03.06 | 563+23.22 | 563+39.97 | 563+43.39 | 563+63.56 | 563+83.72 | 564+04.69 | 564+11.72 | 564+25.66 | 564+46.62 | 564+67.59 | 564+88.56 | |
| | ELEVATION | 995.57 | 995.62 | 995.62 | 995.64 | 995.63 | 995.57 | 995.48 | 995.46 | 995.33 | 995.19 | 995.08 | 995.06 | 994.99 | 994.85 | 994.65 | 994.39 | |

PARSONS
100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235

DATE: 3/17
REVIEWED: RWB
DRAWN: GF
DESIGNED: TMB
CHECKED: NUM

STRUCTURE FILE NUMBER: 4900243

TOP OF HAUNCH ELEVATIONS
BRIDGE NO. MAD-SR29-1061
OVER I.R. 70

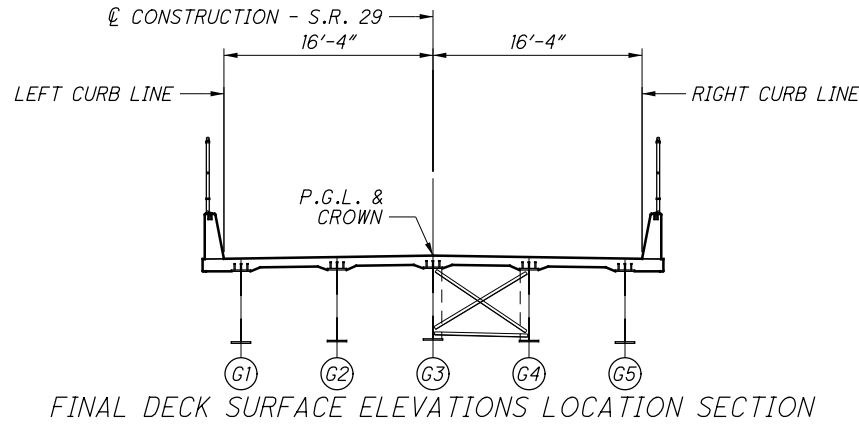
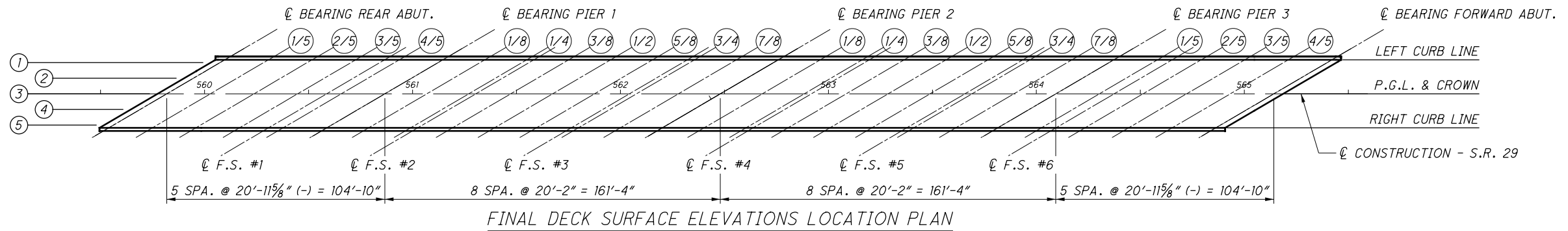
MAD-29-10.61
PID No. 104867

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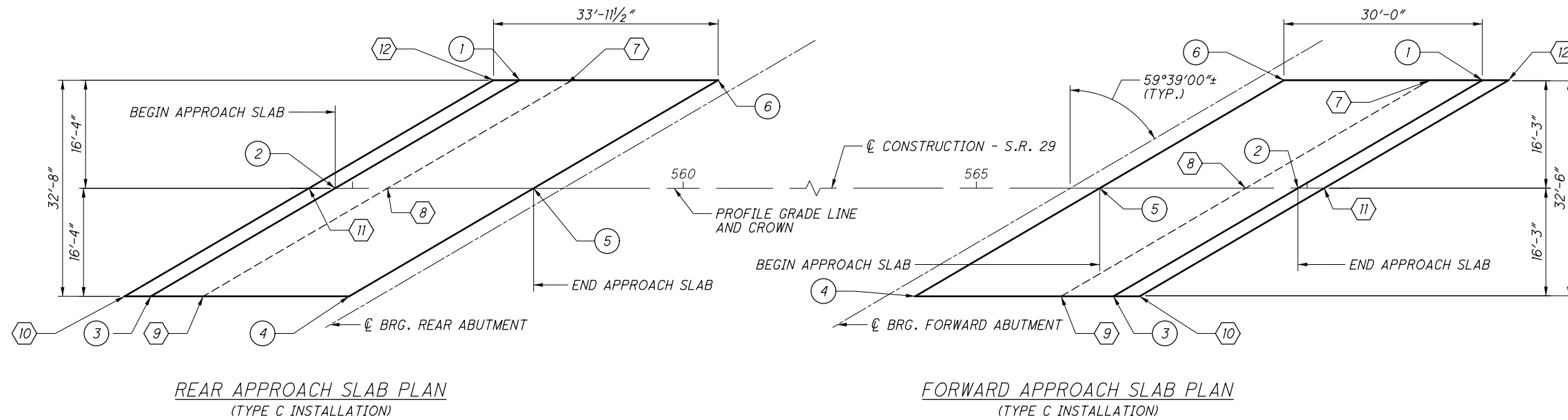
LEGEND:
 F.S. - FIELD SPLICE
 (X) - GIRDER LINE "X"



NOTES:
 1. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

| FINAL DECK ELEVATIONS | | | | | | | | | | | | | | | | | | |
|-----------------------|-----------|-----------|---------------|-----------|-----------|-----------|-----------|-------------------|---------------|-------------------|---------------|-----------|-----------|-----------|-----------|----------------------|-----------|-----------|
| POINT | STATION | ELEVATION | SPAN NUMBER 1 | | | | | CENT. BRG. PIER 1 | SPAN NUMBER 2 | | | | | | | CENT. BRG. PIER 2 | | |
| | | | 1/5 POINT | 2/5 POINT | 3/5 POINT | F.S. #1 | 4/5 POINT | | 1/8 POINT | 1/4 POINT | F.S. #2 | 3/8 POINT | 1/2 POINT | 5/8 POINT | F.S. #3 | | 3/4 POINT | 7/8 POINT |
| LEFT CURB | STATION | 560+09.74 | 560+30.70 | 560+51.67 | 560+72.64 | 560+86.57 | 560+93.60 | 561+14.57 | 561+34.74 | 561+54.90 | 561+58.32 | 561+75.07 | 561+95.24 | 562+15.40 | 562+32.15 | 562+35.57 | 562+55.74 | 562+75.90 |
| | ELEVATION | 995.09 | 995.29 | 995.47 | 995.63 | 995.73 | 995.77 | 995.89 | 996.00 | 996.08 | 996.10 | 996.15 | 996.20 | 996.24 | 996.26 | 996.26 | 996.26 | 996.26 |
| GIRDER LINE 1 | STATION | 560+07.46 | 560+28.42 | 560+49.39 | 560+70.36 | 560+84.29 | 560+91.32 | 561+12.29 | 561+32.46 | 561+52.62 | 561+56.04 | 561+72.79 | 561+92.96 | 562+13.12 | 562+29.87 | 562+33.29 | 562+53.46 | 562+73.62 |
| | ELEVATION | 995.09 | 995.29 | 995.47 | 995.63 | 995.73 | 995.78 | 995.90 | 996.01 | 996.09 | 996.11 | 996.17 | 996.22 | 996.26 | 996.27 | 996.28 | 996.28 | 996.28 |
| GIRDER LINE 2 | STATION | 559+94.65 | 560+15.62 | 560+36.58 | 560+57.55 | 560+71.48 | 560+78.52 | 560+99.48 | 561+19.65 | 561+39.82 | 561+43.23 | 561+59.98 | 561+80.15 | 562+00.32 | 562+17.07 | 562+20.48 | 562+40.65 | 562+60.82 |
| | ELEVATION | 995.08 | 995.29 | 995.48 | 995.66 | 995.76 | 995.81 | 995.95 | 996.06 | 996.16 | 996.18 | 996.24 | 996.31 | 996.35 | 996.38 | 996.39 | 996.40 | 996.40 |
| GIRDER LINE 3 | STATION | 559+81.84 | 560+02.81 | 560+23.77 | 560+44.74 | 560+58.67 | 560+65.71 | 560+86.67 | 561+06.84 | 561+27.01 | 561+30.42 | 561+47.17 | 561+67.34 | 561+87.51 | 562+04.26 | 562+07.67 | 562+27.84 | 562+48.01 |
| | ELEVATION | 995.07 | 995.29 | 995.49 | 995.67 | 995.79 | 995.84 | 995.99 | 996.11 | 996.22 | 996.24 | 996.31 | 996.39 | 996.45 | 996.48 | 996.49 | 996.51 | 996.52 |
| GIRDER LINE 4 | STATION | 559+69.03 | 559+90.00 | 560+10.96 | 560+31.93 | 560+45.86 | 560+52.90 | 560+73.86 | 560+94.03 | 561+14.20 | 561+17.61 | 561+34.36 | 561+54.53 | 561+74.70 | 561+91.45 | 561+94.86 | 562+15.03 | 562+35.20 |
| | ELEVATION | 994.80 | 995.03 | 995.25 | 995.44 | 995.56 | 995.62 | 995.78 | 995.91 | 996.03 | 996.05 | 996.14 | 996.22 | 996.29 | 996.34 | 996.34 | 996.38 | 996.40 |
| GIRDER LINE 5 | STATION | 559+56.22 | 559+77.19 | 559+98.16 | 560+19.12 | 560+33.06 | 560+40.09 | 560+61.06 | 560+81.22 | 561+01.39 | 561+04.81 | 561+21.56 | 561+41.72 | 561+61.89 | 561+78.64 | 561+82.06 | 562+02.22 | 562+22.39 |
| | ELEVATION | 994.54 | 994.78 | 995.00 | 995.21 | 995.33 | 995.39 | 995.56 | 995.71 | 995.84 | 995.86 | 995.95 | 996.05 | 996.13 | 996.18 | 996.19 | 996.24 | 996.27 |
| RIGHT CURB | STATION | 559+53.95 | 559+74.91 | 559+95.88 | 560+16.85 | 560+30.78 | 560+37.81 | 560+58.78 | 560+78.95 | 560+99.11 | 561+02.53 | 561+19.28 | 561+39.45 | 561+59.61 | 561+76.36 | 561+79.78 | 561+99.95 | 562+20.11 |
| | ELEVATION | 994.49 | 994.73 | 994.96 | 995.16 | 995.29 | 995.35 | 995.53 | 995.67 | 995.81 | 995.83 | 995.92 | 996.02 | 996.10 | 996.15 | 996.16 | 996.21 | 996.24 |
| POINT | STATION | ELEVATION | SPAN NUMBER 3 | | | | | | | CENT. BRG. PIER 3 | SPAN NUMBER 4 | | | | | CENT. BRG. FWD ABUT. | | |
| | | | 1/8 POINT | 1/4 POINT | F.S. #4 | 3/8 POINT | 1/2 POINT | 5/8 POINT | F.S. #5 | | 3/4 POINT | 7/8 POINT | 1/5 POINT | F.S. #6 | 2/5 POINT | | 3/5 POINT | 4/5 POINT |
| LEFT CURB | STATION | 562+96.07 | 563+16.24 | 563+19.65 | 563+36.40 | 563+56.57 | 563+76.74 | 563+93.49 | 563+96.90 | 564+17.07 | 564+37.24 | 564+58.20 | 564+65.24 | 564+79.17 | 565+00.14 | 565+21.10 | 565+42.07 | |
| | ELEVATION | 996.21 | 996.16 | 996.15 | 996.10 | 996.02 | 995.92 | 995.83 | 995.80 | 995.67 | 995.52 | 995.35 | 995.29 | 995.16 | 994.95 | 994.73 | 994.49 | |
| GIRDER LINE 1 | STATION | 562+93.79 | 563+13.96 | 563+17.37 | 563+34.12 | 563+54.29 | 563+74.46 | 563+91.21 | 563+94.62 | 564+14.79 | 564+34.96 | 564+55.92 | 564+62.96 | 564+76.89 | 564+97.86 | 565+18.82 | 565+39.79 | |
| | ELEVATION | 996.24 | 996.19 | 996.18 | 996.13 | 996.05 | 995.95 | 995.86 | 995.84 | 995.71 | 995.56 | 995.39 | 995.33 | 995.21 | 995.00 | 994.78 | 994.54 | |
| GIRDER LINE 2 | STATION | 562+80.98 | 563+01.15 | 563+04.57 | 563+21.32 | 563+41.48 | 563+61.65 | 563+78.40 | 563+81.82 | 564+01.98 | 564+22.15 | 564+43.12 | 564+50.15 | 564+64.08 | 564+85.05 | 565+06.02 | 565+26.98 | |
| | ELEVATION | 996.38 | 996.34 | 996.34 | 996.29 | 996.22 | 996.14 | 996.05 | 996.03 | 995.91 | 995.78 | 995.62 | 995.56 | 995.44 | 995.25 | 995.03 | 994.80 | |
| GIRDER LINE 3 | STATION | 562+68.17 | 562+88.34 | 562+91.76 | 563+08.51 | 563+28.67 | 563+48.84 | 563+65.59 | 563+69.01 | 563+89.17 | 564+09.34 | 564+30.31 | 564+37.34 | 564+51.27 | 564+72.24 | 564+93.21 | 565+14.17 | |
| | ELEVATION | 996.51 | 996.49 | 996.48 | 996.45 | 996.39 | 996.31 | 996.24 | 996.22 | 996.11 | 995.99 | 995.84 | 995.79 | 995.67 | 995.49 | 995.29 | 995.07 | |
| GIRDER LINE 4 | STATION | 562+55.36 | 562+75.53 | 562+78.95 | 562+95.70 | 563+15.86 | 563+36.03 | 563+52.78 | 563+56.20 | 563+76.36 | 563+96.53 | 564+17.50 | 564+24.53 | 564+38.46 | 564+59.43 | 564+80.40 | 565+01.36 | |
| | ELEVATION | 996.40 | 996.39 | 996.38 | 996.35 | 996.31 | 996.24 | 996.18 | 996.16 | 996.06 | 995.95 | 995.81 | 995.76 | 995.66 | 995.48 | 995.29 | 995.08 | |
| GIRDER LINE 5 | STATION | 562+42.56 | 562+62.72 | 562+66.14 | 562+82.89 | 563+03.06 | 563+23.22 | 563+39.97 | 563+43.39 | 563+63.56 | 563+83.72 | 564+04.69 | 564+11.72 | 564+25.66 | 564+46.62 | 564+67.59 | 564+88.56 | |
| | ELEVATION | 996.28 | 996.28 | 996.27 | 996.26 | 996.22 | 996.17 | 996.11 | 996.09 | 996.01 | 995.90 | 995.78 | 995.73 | 995.63 | 995.47 | 995.29 | 995.09 | |
| RIGHT CURB | STATION | 562+40.28 | 562+60.45 | 562+63.86 | 562+80.61 | 563+00.78 | 563+20.95 | 563+37.70 | 563+41.11 | 563+61.28 | 563+81.45 | 564+02.41 | 564+09.45 | 564+23.38 | 564+44.35 | 564+65.31 | 564+86.28 | |
| | ELEVATION | 996.26 | 996.26 | 996.26 | 996.24 | 996.20 | 996.15 | 996.09 | 996.08 | 996.00 | 995.89 | 995.77 | 995.73 | 995.63 | 995.47 | 995.29 | 995.09 | |

PARSONS
 100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235
 DATE: 3/17
 REVIEWED: RWB
 STRUCTURE FILE NUMBER: 4900243
 DRAWN: GF
 CHECKED: REVISED
 DESIGNED: TMB
 CHECKED: NUM
FINAL DECK SURFACE ELEVATIONS
 BRIDGE NO. MAD-SR29-1061
 OVER I.R. 70
MAD-29-10.61
 PID No. 104867
 28/30
 74
 76



| APPROACH SLAB AND SLEEPER SLAB SURFACE ELEVATIONS | | | | |
|---|--------------------|-----------|-----------------------|-----------|
| POINT | REAR APPROACH SLAB | | FORWARD APPROACH SLAB | |
| | STATION | ELEVATION | STATION | ELEVATION |
| ① | 559+75.13 | 994.73 | 565+76.37 | 994.09 |
| ② | 559+47.38 | 994.62 | 565+48.62 | 994.68 |
| ③ | 559+19.63 | 993.95 | 565+20.87 | 994.73 |
| ④ | 559+49.63 | 994.39 | 564+90.87 | 995.05 |
| ⑤ | 559+77.38 | 995.02 | 565+18.62 | 995.02 |
| ⑥ | 560+05.13 | 995.05 | 565+46.37 | 994.44 |
| POINT | REAR SLEEPER SLAB | | FORWARD SLEEPER SLAB | |
| | STATION | ELEVATION | STATION | ELEVATION |
| ⑦ | 559+83.05 | 993.40 | 565+68.46 | 992.77 |
| ⑧ | 559+55.30 | 993.32 | 565+40.70 | 993.35 |
| ⑨ | 559+27.54 | 992.65 | 565+12.95 | 993.40 |
| ⑩ | 559+15.67 | 992.48 | 565+24.83 | 993.27 |
| ⑪ | 559+43.42 | 993.14 | 565+52.58 | 993.21 |
| ⑫ | 559+71.17 | 993.27 | 565+80.33 | 992.63 |

NOTES:

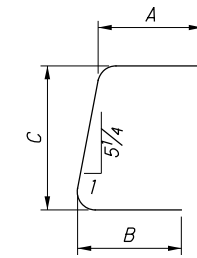
1. APPROACH SLAB REINFORCING STEEL SHALL BE AS PER ODOT STANDARD DRAWING AS-1-15 AND SHALL BE INCLUDED FOR PAYMENT WITH ITEM 526 REINFORCED CONCRETE APPROACH SLABS (T=17").
2. SLEEPER SLAB REINFORCING STEEL SHALL BE PER ODOT STANDARD DRAWING AS-2-15 AND SHALL BE INCLUDED FOR PAYMENT WITH ITEM 526 TYPE C INSTALLATION.
3. TYPE C INSTALLATION IS SHOWN WITHOUT THE OPTIONAL ASPHALT CONCRETE WEARING SURFACE COARSE.
4. SLEEPER SLAB ELEVATIONS 10 - 12 FOR TYPE C INSTALLATION ARE AT THE TOP OF SLEEPER SLAB AND NOT AT THE ROADWAY SURFACE.

| | |
|--|----------------------------------|
| PARSONS 100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235 | DATE 3/17 |
| REVIEWED RWB | STRUCTURE FILE NUMBER 4900243 |
| DRAWN JRE | REVISED |
| DESIGNED JRE | CHECKED JLW |
| APPROACH SLABS BRIDGE NO. MAD-SR29-1061 OVER I.R. 70 | |
| MAD-29-10.61 | PID No. 104867 |
| 29/30 | |
| 75 76 | |

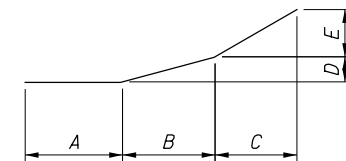
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| MARK | NUMBER TOTAL | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|------------------|-----------------|---------|--------|------|------------|------------|-----------|-----------|-------|---------------|-----|
| | | | | | A | B | C | D | E | R | INC |
| ABUTMENTS | | | | | | | | | | | |
| RA501 | 4 | 31'-5" | 131 | STR | | | | | | | |
| RA502 | 4 | 12'-5" | 52 | STR | | | | | | | |
| RA503 | 42 | 3'-11" | 172 | STR | | | | | | | |
| RA504 | 5 | 5'-11" | 31 | 19 | 3'-7" | 1'-11 3/4" | 1'-2" | | | | |
| RA505 | 5 | 7'-9" | 40 | 11 | 1'-11 3/4" | 1'-2" | 5'-7" | | | | |
| RA506 | 23 | 6'-8" | 160 | STR | | | | | | | |
| RA507 | 5 | 6'-4" | 33 | STR | | | | | | | |
| RA508 | 5 | 7'-3" | 38 | STR | | | | | | | |
| RA509 | 5 | 4'-6" | 23 | 14 | 1'-6" | 0'-5" | 0'-7" | 1'-0" | 1'-6" | | |
| FA501 | 4 | 31'-5" | 131 | STR | | | | | | | |
| FA502 | 4 | 12'-5" | 52 | STR | | | | | | | |
| FA503 | 42 | 3'-11" | 172 | STR | | | | | | | |
| FA504 | 5 | 5'-11" | 31 | 19 | 3'-7" | 1'-11 3/4" | 1'-2" | | | | |
| FA505 | 5 | 7'-9" | 40 | 11 | 1'-11 3/4" | 1'-2" | 5'-7" | | | | |
| FA506 | 23 | 6'-8" | 160 | STR | | | | | | | |
| FA507 | 5 | 6'-4" | 33 | STR | | | | | | | |
| FA508 | 5 | 7'-3" | 38 | STR | | | | | | | |
| FA509 | 5 | 4'-6" | 23 | 14 | 1'-6" | 0'-5" | 0'-7" | 1'-0" | 1'-6" | | |
| SUBTOTAL | | | 1360 | | | | | | | | |
| PARAPETS | | | | | | | | | | | |
| R501 | 1192 | 7'-4" | 9117 | 23 | 0'-11" | 3'-3" | 3'-0" | | | 0'-2 3/4" | |
| R502 | 152 | 30'-0" | 4756 | STR | | | | | | | |
| R503 | 8 | 37'-5" | 312 | STR | | | | | | | |
| R504 | 64 | 5'-2" | 345 | STR | | | | | | | |
| R505 | 112 | 5'-8" | 662 | STR | | | | | | | |
| R506 | 4 | 14'-10" | 62 | STR | | | | | | | |
| R507 | 72 | 14'-8" | 1101 | STR | | | | | | | |
| R508 | 32 | 10'-0" | 334 | STR | | | | | | | |
| R509 | 16 | 5'-8" | 95 | 25 | 1'-10" | 2'-5" | 1'-4 1/4" | 0'-1 1/2" | 0'-5" | | |
| R510 | 16 | 5'-8" | 95 | STR | | | | | | | |
| R511 | 4 | 17'-5" | 73 | STR | | | | | | | |
| R512 | 36 | 7'-4" | 275 | 23 | 0'-11" | 3'-3" | 3'-0" | | | 0'-2 3/4" | |
| R513 | 8 | 27'-7" | 230 | STR | | | | | | | |
| R601 | 1192 | 2'-5" | 4327 | 1 | 1'-0" | 1'-7" | | | | | |
| R602 | 1192 | 3'-2" | 5670 | 28 | 0'-11" | 1'-0" | 1'-7" | | | | |
| R603 | 32 | 5'-2" | 248 | STR | | | | | | | |
| R604 | 56 | 5'-8" | 477 | STR | | | | | | | |
| R605 | 2 | 14'-10" | 45 | STR | | | | | | | |
| R606 | 36 | 14'-8" | 793 | STR | | | | | | | |
| R607 | 2 | 17'-5" | 52 | STR | | | | | | | |
| R608 | 36 | 2'-9" | 149 | STR | | | | | | | |
| R609 | 36 | 3'-6" | 189 | 13 | 1'-10" | 0'-11" | 0'-2" | 0'-11" | | | |
| | 4 | 4'-4" | | | | | | | | | |
| R610 | SER OF | TO | 314 | STR | | | | | | 0'-1" | |
| | 11 | 5'-2" | | | | | | | | | |
| | 4 | 4'-4" | | | | | | | | | |
| R611 | SER OF | TO | 342 | STR | | | | | | 0'-0 7/8" (+) | |
| | 12 | 5'-2" | | | | | | | | | |
| R612 | 24 | 4'-4" | 156 | STR | | | | | | | |
| SUBTOTAL | | | 30219 | | | | | | | | |

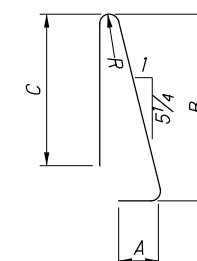
| MARK | NUMBER TOTAL | LENGTH | WEIGHT | TYPE | DIMENSIONS | | | | | | |
|-----------------------|-----------------|---------|--------|------|------------|-----------|-------|-----------|---|---------------|-----|
| | | | | | A | B | C | D | E | R | INC |
| SUPERSTRUCTURE | | | | | | | | | | | |
| S401 | 779 | 30'-0" | 15611 | STR | | | | | | | |
| S402 | 41 | 20'-0" | 548 | STR | | | | | | | |
| S403 | 360 | 38'-9" | 9319 | STR | | | | | | | |
| S404 | 16 | 6'-9" | 72 | STR | | | | | | | |
| S405 | 928 | 1'-11" | 1188 | STR | | | | | | | |
| S501 | 1026 | 30'-0" | 32104 | STR | | | | | | | |
| S502 | 54 | 37'-5" | 2107 | STR | | | | | | | |
| S503 | 1664 | 35'-7" | 61756 | STR | | | | | | | |
| | 4 | 6'-11" | | | | | | | | | |
| S504 | SER OF | TO | 6814 | STR | | | | | | 0'-4 1/8" (-) | |
| | 80 | 33'-11" | | | | | | | | | |
| S505 | 72 | 6'-7" | 494 | STR | | | | | | | |
| S506 | 1131 | 9'-6" | 11207 | 21 | 1'-4" | 0'-5 1/2" | 3'-6" | 0'-5 1/2" | | | |
| S507 | 68 | 25'-1" | 1779 | 3 | 6'-9" | 5'-6" | | | | | |
| S508 | 16 | 21'-1" | 352 | 3 | 6'-9" | 3'-6" | | | | | |
| S509 | 84 | 8'-3" | 723 | 2 | 2'-7" | 3'-4" | 2'-7" | | | | |
| S801 | 86 | 8'-0" | 1837 | 18 | 5'-8" | 1'-0" | 1'-0" | | | | |
| S802 | 48 | 27'-7" | 3535 | STR | | | | | | | |
| S803 | 24 | 20'-7" | 1319 | STR | | | | | | | |
| S804 | 24 | 10'-7" | 678 | STR | | | | | | | |
| S805 | 16 | 7'-0" | 299 | STR | | | | | | | |
| S806 | 32 | 5'-5" | 463 | 18 | 3'-3" | 1'-0" | 1'-0" | | | | |
| SUBTOTAL | | | 141220 | | | | | | | | |



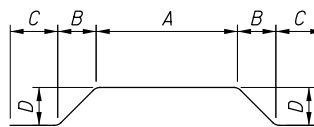
TYPE-28



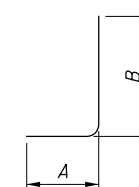
TYPE-25



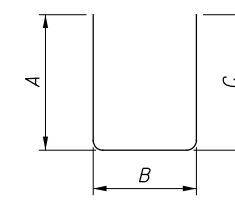
TYPE-23



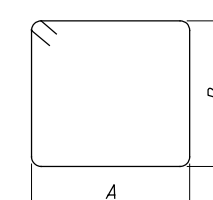
TYPE-21



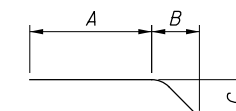
TYPE-1



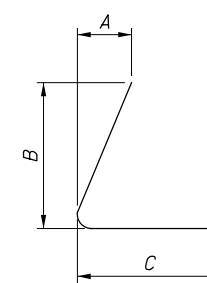
TYPE-2



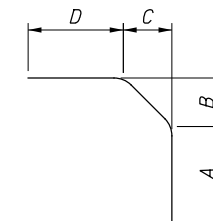
TYPE-3



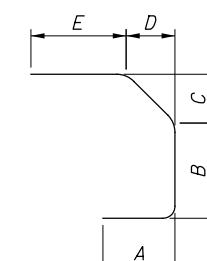
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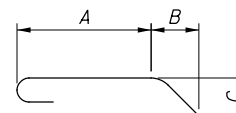
TYPE-11



TYPE-13



TYPE-14



TYPE-18

NOTES:
1. ALL REINFORCING STEEL TO BE EPOXY COATED.

PARSONS
100 E. Campus View Blvd., Suite 250 • Columbus, Ohio 43235

REINFORCING STEEL LIST
BRIDGE NO. MAD-SR29-1061
OVER I.R. 70

MAD-29-10.61
PID No. 104867

DESIGNED: JRE
CHECKED: JLW

DRAWN: JRE
REVISED:

REVIEWED: RWB
DATE: 3/17

STRUCTURE FILE NUMBER: 4900243

30/30

76
76